

# PHILADELPHIA MEDICAL TIMES.

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## ORIGINAL LECTURES.

### CLINICAL LECTURE ON CEREBRAL SYPHILIS.

*Delivered at the Hospital of the University of Pennsylvania*

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Reported by WILLIAM H. MORRISON, M.D.

**G**ENTLEMEN,—I saw this man for the first time about three weeks ago. While in a neighboring city I was asked to see him in consultation. I examined him with care, and it was decided that he should come here to be treated. I can only give you the history as it was told to me at that time, for the condition of the patient is unfortunately such that he can give us no reliable information. He has been a hard-working man. He contracted syphilis many years ago. He had few secondary symptoms, and was regarded as absolutely well. He then married, and has had three perfectly healthy children. He has been somewhat overworked, but not sufficiently so to justify his present broken-down condition. About two years ago he fell down a hatchway, producing a bad fracture of both bones of the right leg, and striking himself on the back; and he also received injuries about the head. There was no fracture of the skull, nor were there any symptoms of concussion of the brain. I call particular attention to this, because it has an important bearing on the symptoms which he presents. Previous to this accident he had begun to complain of headache of the most persistent character. This became increasingly severe after the fall. It was several months before he was able to be about. It was then noticed that there was some peculiarity in walking; but this may have been due to the fracture of the leg. It was supposed that the symptoms were merely the result of the shock to the system from the violent fall. About last January (eight months ago), he had a severe general convulsion, with entire unconsciousness, and with muscular movements involving both sides of the

body. Since then the convulsions have recurred at irregular intervals. With this there has been a progressive failure of the intellectual powers. His mind has been growing dull, and his memory weak and confused. The eyesight has failed somewhat, and his gait has become more unsteady; the headache has continued, but is not so severe as formerly.

**Present Condition.**—He is without fever, or at the most has had an occasional trifling rise of temperature in the evening to 99.6°, and on rare occasions to 100°. He often passes days without any elevation of temperature. I would note that since his admission, eighteen days ago, there has been on three occasions a temperature of 100°, and several times it has been 99°, showing an irritative condition of the system. He has a rather surprised, bewildered expression on the face. His memory is confused: he was in the hospital several days before he could realize where he was. He was much worried about his children, asking continually how soon he would be able to go back to them. In other respects there seems to be no mental aberration. He can read fairly well. The pupils react both to light and accommodation. There is no paralysis of the facial muscles or of the tongue. Hearing is not affected. The knee-jerks are increased, perhaps on the right a little more than on the left. The other reflexes are not increased. There is some slight enlargement of the glands in both groins. I do not know that this is to be regarded as syphilitic, but I mention it on account of the history which we have obtained. There are sometimes slight twitches in the muscles of the eyes, and occasionally a little approach to nystagmus, but this is not marked. When the hands are stretched out there is marked muscular tremor. There is some slight ataxia in the conjoined movements of the arms and hands. In the legs there is no loss of power, and the affection of the gait does not seem to be greater than might be explained by the rather badly healed fracture of the right leg. There is some tremor in the lower extremities. He stands well with the eyes shut. He complains slightly of pain in the back, and of a feeling of coldness, which he has had since admission.

The eyes were examined by Dr. George E. De Schweinitz, who makes the follow-

ing report. "The action of the pupils is good, the right pupil being slightly larger than the left. The excursion of the eyes is good, except laterally to the right, when the movement is arrested with a jerk. There is no paralysis of any of the muscles, but insufficiency of the internal recti, between six and seven degrees. The eyeground of the left eye shows the disk oval, the veins normal in calibre. The disk is grayish red in color. The arteries are distinctly small, and in some places quite contracted. The lymph-sheaths along the arteries are full, but not so along the veins. The right eye shows a large, irregular-shaped nerve, with central excavation, and a similar condition of the arteries and veins as noted in the left eye. Central color-perception is good in both eyes. The field of vision is contracted more on the left side than on the right. The diagnosis is gray degeneration of both optic nerves."

The following notes have been made since admission.

September 28, the day following admission. He complains of loss of memory; does not recognize individuals, and recurs to the same subject constantly; but there are no distinct hallucinations.

September 30. Had severe convulsion at 3 P.M. It began with a cry, and was followed by twitching of the left side of the face; then by convulsive movements of the right hand and arm; then of the right side of the face. There was some increased flow of saliva, with frothing. Some loss of power of deglutition and nystagmus accompanied it. The convulsion was diminished by inhalation of nitrite of amyl. The patient was then laid upon the bed. He was then seized with a general convulsion of severe character, lasting ten minutes, accompanied by profound loss of consciousness, by frothing at the mouth, by livid discoloration of the face, and by universal clonic movements. Twenty grains of chloral hydrate were given by the rectum, and half an hour later twenty-five grains of potassium bromide were administered by the mouth.

Here, then, is a case of great gravity, one not unattended with obscurity, where it is exceedingly important that we should arrive at an accurate diagnosis to guide us in its treatment. In the first place, as to the diagnosis of this case. You will observe that we have two distinct morbid

influences to study. First, the effect of the injury, the concussion of the spine, with the asserted injury of the head, although there were no evidences of severe injury of the skull or brain; and, secondly, the effects of the old syphilis, with some evidences of constitutional infection, but with a long period of quiescence, during which healthy children have been born to him. It seems impossible to consider that this condition is due to the injury. There is undoubtedly a lesion within the cranium. This probably might be produced by an extensive creeping meningitis which had involved the sheaths of the optic nerves and led to degeneration of the nerve-trunks. This might have been set up by an injury: a fissured fracture or a depressed fracture, with a spicule of bone irritating the surface of the brain, might excite a subacute process extending along the base and giving rise to these symptoms. From the history of the injury which we have been able to obtain, I think that it is not reasonable to believe that the accident really was followed by such serious lesions within the cranium. This condition might be dependent upon an inflammatory lesion arising under the influence of the old syphilis. A syphilitic meningitis or a syphilitic gumma developing in the membranes and involving the surface of the brain might cause the symptoms which this man has presented. From a survey of the whole case, we cannot help feeling that the evidence points strongly to the syphilitic origin of the trouble. The gravity of the nervous symptoms has been no doubt influenced by the severe nervous shock accompanying the injury; but that the whole trouble is traumatic I think cannot be maintained.

Cerebral syphilis is one of the most common expressions of constitutional syphilis. The anatomical lesions are gumma—that is, an isolated tumor growing in the membranes and encroaching upon the surface of the brain by pressure—and meningitis involving the arachnoid or the dura mater or periosteum. Of course, the inflammation of the dura is practically an internal periostitis. These are the common lesions. Among the symptoms which we note in cerebral syphilis, headache is the most constant, often being violent and continuous, lasting for days or weeks. Convulsion is an extremely frequent symptom, the character of the con-

vulsion differing according to the lesion. When the lesion is very circumscribed, for instance, a small gumma involving some cortical centre, we may have distinctly-marked, circumscribed spasm of some part of the body, which may be limited to a single member, as the arm or the muscles of the hand, or those of the face; or the convulsions may be general. Sometimes the spasm can be traced to certain groups of muscles where it will begin, and whence it will spread until the whole area which is to be involved is affected. A careful study of this point is of great importance when we come to consider the possibility of determining the exact location of the lesion in this and similar cases. In those convulsions dependent upon a circumscribed lesion, consciousness may not be entirely lost, or it may not be lost at all. On the other hand, the irritation may be so great that from this centre which starts the convulsion in one group of muscles the irritation will spread to other centres, producing loss of consciousness, and later even general convulsion. Another important symptom is the lesion of the optic nerve: that is, gray degeneration and atrophy. This case illustrates the importance of the ophthalmoscopic examination in all such cases. This man reads fairly well, and he complains of no dimness of vision. There may be advanced lesion of the optic nerve without any appreciable defect of vision as determined by the ordinary standards. Next in importance are lesions of other intracranial nerve-trunks attended with local palsies, as of the face or of the muscles about the eye. The only symptom here is insufficiency of the internal recti; but it is not great enough to be regarded as significant. Then we have failure of memory and of mental power. This is dependent upon prolonged irritation, and sometimes upon actual softening from pressure by exudation, either from a gumma or from meningeal thickening.

The first question, then, of practical importance in the diagnosis of this case, after having determined the presence of cerebral syphilis, is whether the lesion is a diffused or a strictly circumscribed one. Now, this would not have been so important a few years ago as it is to-day. It is a fact that the study of cerebral topography and the localization of lesions connected with certain special symptoms has already

advanced so far that we are able to define the precise position of a number of lesions within the cranium where certain specific symptoms are present; so much so that within the past year or two there have been several cases where trephining has been performed, the lesion found, and the growth removed, with recovery of the patient. The gumma, and in some cases the neoplasm of other character, has been as accurately located and removed as though it had been a superficial growth. The importance of determining whether the lesion is diffused or is circumscribed is at once apparent. All the evidence in this case is in favor of a diffused lesion. The double atrophy of the optic nerves, the mental failure, the loss of memory, and the character of the convulsion would indicate extensive lesion. As we have noted, the spasm begins on the left side of the face, then affects the right hand and arm and the right side of the face, and is followed by a general convulsion. This is not an indication that a minute cortical centre is affected, but points to a widespread disturbance of the motor centres. A diffused lesion, either a meningeal exudation or several gummata, would seem to be the diagnosis, and in all probability, from the diffused character of the headache, it is a meningeal lesion.

The treatment may be internal, and must be addressed to the syphilitic element of the case. He has been put on ascending doses of potassium iodide, with ascending doses of mercuric bichloride, so as to reach as rapidly as possible the point of tolerance of the system. The patient has been quieter during the past few days; but whether this is due to the treatment or to the fact that he is becoming more familiar with his surroundings cannot be determined. I shall bring him before you again in a few weeks, when we shall be better able to judge of the effect of treatment.

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A NEW PROFESSORSHIP IN THE UNIVERSITY OF PENNSYLVANIA.—We take great pleasure in noting the happy choice of the trustees of the University of Pennsylvania in their selection of Dr. Daniel G. Brinton, of this city, as Professor of American Archaeology and Linguistics. Dr. Brinton has already attained distinction by his studies in the early dialects of the American Indians, and is a vigorous writer and lecturer.

## ORIGINAL COMMUNICATIONS.

## A CASE OF APHASIA, WITH REMARKS.

*Read before the New York State Medical Society, Third District Branch, meeting at Binghamton, Sept. 17, 1886,*

BY S. M. HAND, M.D.,

Norwich, New York.

(Continued from page 90.)

ALL teachers on the subject describe amnesic aphasia as a forgetfulness of words, and ataxic aphasia as a loss of the power of co-ordinating the movements necessary for the articulation of these words. Technically it is not a forgetfulness of words, but a loss of the faculty of creating internal words or word-images as representatives of ideas, for there is first an internal speech before it can be made external by articulation.

In the case I have related, intelligence is perfectly preserved, and questions and the value of words are as thoroughly comprehended as in her former normal condition, and when the word-image is presented by pronouncing it in her hearing her power of co-ordinating the movements necessary for the articulation of the word is excited to activity and acts as perfectly as it did in her normal condition. There are cases in which the co-ordinating power is lost while the internal word-creating power is normal; and there are cases in which this co-ordinating power is normal while the word-creating faculty is lost.

Vocal language is not altogether voluntary, but partly voluntary and partly automatic, by the same reason that walking and playing a piano are automatic in part, and even much of all we do is automatic, while much less is voluntary. In a case, therefore, of amnesic aphasia the subject may say, "How do you do?" or "I don't know," and not be able to repeat it if requested to do so. The case of the late Dr. Wicks, of Gilbertsville, illustrates an automatic power for speech. He was suddenly arrested, while walking on his lawn one morning, with a partial hemiplegia of the right side, and had lost the ability to speak. He could not say yes or no, or speak any other word except the sound "terita." When I asked him to say "cup," he looked at the cup (which stood on the table near him) and said, "Terita, terita," and repeated it; and then, with an expression of impatience by the gestures of his face, said, "Damn it."

Then I asked him to say, "Damn it," and he said, "Terita, terita;" and, with the same expression of impatience, after the second effort he said, "Damn it." He could not speak a syllable voluntarily, but he did speak automatically, and showed that he was not ataxic, but that he was amnesic.

Another case which I recently saw illustrates a condition which is curiously unlike any of the fifteen cases described by Hammond. A man who is now 35 years of age, who had been a locomotive engineer five years ago, suddenly suffered partial hemiplegia of the right side and lost his ability to speak. The hemiplegia is so far recovered that he is now able to walk and to work some in the garden, but he has not been able to speak one word voluntarily since. The only sound he makes is "dina dina." He cannot write a word or syllable to convey an idea, but he can readily copy a written line. He can read a newspaper or a written sentence, and can count and make the figures to number his brothers and sisters and to express his age. When requested to write the name of his town he could not do it, but could find the name and point it out on the newspaper, or could copy it in printed characters from the newspaper. This is a case of partly amnesic and partly ataxic aphasia, for he can read, but cannot write nor speak, and can count and write the figures that express the numbers. He appeared willing to attempt anything that he was requested, and made an effort to write the name of his town, but could not do so; but he could write his name.

I was called, a few weeks since, in consultation with my neighbor in medicine, to see a colored woman, whom we found with partial hemiplegia of the right side and a much impaired ability to speak. She commenced every attempt to speak with "I want," and some of the time with only this expression; but with some attempts would add a word or two slowly. When she was requested to write her name she did so two or three times, but in all cases with a duplication of one of the letters of her name. Her name was Street, and she duplicated the first "t". When she was requested to write the word "blanket" she made a faithful attempt, but could not succeed with the first letter, nor of any other word she was requested to write. She was ordinarily able to write very well. It would seem as if her suc-



cess in writing her name was partially at least automatic. This could not properly be called a case of ataxic aphasia, but was a case of incomplete amnesic aphasia, for her articulation was perfect for the pronunciation of words, but with very difficult recollection of words, or with much impairment of the internal word-making faculty.

All language of course originates in the gray matter of the cerebral lobes, and it has been claimed by some that we think in a language. This has been questioned by others, and it might indeed be difficult to demonstrate the correctness of either position. But when we hear the word "orange" Ferrier says we think "orange," and the senses of smell and taste and form are concerned in our conception of the orange; and synchronously with this conception of the object the activity of the speech-centre is excited, and an expression by language results.

The portion of brain called hemisphere is not a single organ, as was supposed in former days, but consists of a number of thoroughly differentiated organs, each one of these having special endowments or functions and yet in closest possible connection with all the other portions of the hemispheres and lower brain-centres.

It is comparatively easy to describe the configuration of the various organs of the lower brain-centres and to determine the function of each, but not as easily possible to define the numerous parts and functions of the hemispheres. Indeed, the phrenologist assumes the necessary understanding by an examination of the external surface of the skull. But to define all these various parts of the hemispheres with accuracy, and to determine their intimate structure and their individual energies and offices, and the changes they are liable to undergo during their development and in results of diseases of them, is a work which at the present time is engaging the attention of the profoundest students and the shrewdest detectives of pathological observations.

However, the functions of some of the convolutions are even now pretty well known, and the exact relations of the various portions of the hemispheres anatomically are well known, but to localize the precise seat of power which the intellect uses to administer its government is not yet unquestionably settled. Of late years, Hit-

zig, Fritsch, and Ferrier have made experiments with the interrupted or faradic currents, and have assumed to be able to map out the convolutions of the front and middle parts of the hemispheres of animals into a number of precisely-limited areas, producing a limited but distinct movement by such stimulation of each; and, while stimulation of a large surface produced general convulsions, the movements were so precise that they answered each to the spot stimulated almost as completely as the note answers to a key struck on a piano. Although this would seem almost a demonstration of the localization of special power in these parts of the convolutions, Foster questions the conclusions, and says that "the exact nature of the connection between galvanic stimulation of the brain-surface and bodily movements is at present very obscure," but that "it is certain that these cerebral spots are not motor centres in a sense that the co-ordination of the movements takes place in them, because the most complete co-ordination obtains in the total absence of the cerebral hemispheres." He credits the probability that "the real connection between the gray matter of the convolutions and these movements with the co-ordinating mechanisms is placed lower down in the brain."

It has been observed when portions of the cerebral hemispheres were gradually removed that no effects were apparent on the intelligence or volition of the animal when the removal commenced, but as it continued greater dulness was manifested, and still greater, until finally intelligence and volition were entirely lost. All surgeons occasionally witness the results of violence when a portion of the brains of a man has been carried away without any marked effect on the physical condition of the patient. The exposed brain seemed not to be at all sensitive, and ordinary stimulants applied to the surface of the convolutions in nearly or quite all experiments have failed to produce any apparent effect. Hence the unbelief in the existence of any localization of functions in the convolutions of the hemispheres, and the belief of some that the brain acts as a whole and not in local parts.

But, we may ask, is the location of the faculty of speech in the human brain a possibility, and are all the lesions which inhibit the power of speech or derange its proper

expressions uniformly found at the same point? It has been so far investigated by experimenters and post-mortem observations of pathological lesions that it is conceded that the faculty of speech begins in the cerebral hemispheres and in the left frontal lobe, and still closer, in its third frontal convolution, and yet closer, in the posterior part of the left third frontal convolution, or—as it is believed by more recent observers from later deductions and comparisons—in the operculum of the island of Reil. Lesions occurring in other regions do not affect the speech unless indirectly through the circulation or continuous sympathy. Aphasias are never called into existence by lesions of the occipital lobes, except possibly in very rare instances by the incidental general disturbance of the hemispheres as a whole, or by a continuous extension that, with the local lesion of the posterior lobes, the convolutions of the anterior lobes, or the island of Reil, is involved with the foreign lesion.

The conclusions of no observer may yet be taken as absolute authority, while they may be entertained as very reasonable, for many are giving attention to the localization of the faculties of the brain, and so far conclude that this faculty of human speech is limited as a power to the region of the posterior part of the left third frontal convolution of the cerebral hemisphere, or in the island of Reil. These parts, it will be remembered, are not in direct continuous relations, but are in immediate contiguous relations. It is understood by all, while these points are themselves in a healthy state and the will orders the pronunciation of a word, that a defect of some subordinate brain-centre may prevent obedience to the order, because then there cannot be the necessary muscular co-ordination to execute the impulse of the will; and yet in such a case as here related, when the entire line of brain-power is surely perfect (as demonstrated by her easy repetition of the sound of the word and the perfect consciousness of her success), it is evident that there is a local lesion; and if in such cases there is uniformly direct or indirect disability of that particular point (as observed in many post-mortem examinations published by Hammond and others), then the conclusion is more than simply reasonable that there is a local centre of power through which the will originates the efferent impulse of speech.

Kussmaul, however, says, "For the purposes of speech there exists an apparatus as vast as it is complicated, consisting of nervous tracts and ganglionic centres, which partly occupy the position of the loftiest workshops of the conscious intelligence and of the will, and are partly reflex agencies, in which simple and ordered sensory stimuli are converted into motion. Such a thing as a simple *centre of language* or *seat of speech* does not exist in the brain any more than a seat of the soul in a simple centre.

"The central organ of speech is, on the contrary, rather composed of a large number of ganglionic apparatuses widely separated from one another, but connected by numerous tracts and fulfilling certain intellectual sensory and motor functions. But it is probable that none of these apparatuses subserve alone the objects of speech. The nervous mechanisms can be made serviceable for different purposes, and it is only practice which brings about those connections between ganglion cell and ganglion cell, between ganglionic centre and ganglionic centre, which render speech in its more restricted sense possible, as well as all the other so very numerous means of expressing our thoughts and feelings. In this sense alone is a central organ of speech gradually cultivated or, as some will say, created in the brain by language itself, and in this sense do there also exist central organs for the plastic art, for dancing, for music, for printing, and for the forms of thought which do not give employment to words, but to numerical signs and other pictorial formula."

But there is evidence which may not be gainsaid that disease of the superficial gray matter of the hemispheres causes delirium (as is so uniformly the case in meningitis), and sometimes convulsions either of an epileptic character or localized in particular groups of muscles; and this local power is also manifested by experiments with the galvanic current, because if the galvanism be applied to particular convolutions and to particular parts of convolutions, definite and uniform co-ordinate movements of various groups of muscles will arise. Thus experiments indicate, if they do not demonstrate, that even the intellectual power is not seated in the gray matter of the hemispheres as a whole, but that a special intellectual power has its residence in a particular portion of one or another of its

convolutions, or lobes, or islands, through which the will sends only the special or particular efferent force with which it is endowed, and receives the returning or afferent impulse to its central home of consciousness. Still, in what particular part or convolution all the various intellectual faculties reside is not yet known, for not all of them have been made the subject of special experiment. But the accidents of violence and disease, interfering with some of the important functions so convenient and necessary to the comforts and uses of men, as hearing and seeing and speaking, have induced an investigation of the condition of the lower and higher brain-centres, so that there is now striking pathological proof accumulated of the connection of certain movements concerned in the production of language with a particular convolution of the brain.

#### REVIEW OF THE PROGRESS OF MEDICAL AND SURGICAL ELECTRICITY.

BY WILLIAM R. D. BLACKWOOD, M.D.,

Neurologist to the Presbyterian Hospital.

#### THE TREATMENT OF INFANTILE PALSY BY GALVANISM.

"IN every case of infantile paralysis, so far from doing good, if persisted in, galvanism does infinite harm in the way of increasing the inevitable deformity. This occurs from the difficulty or practical impossibility of localizing the effects of galvanism on the palsied muscles. To be of any use, electricity must produce muscular contraction, effected in the case of galvanism by interruptions of the current. When a strong current is used,—and this is generally necessary,—the current diffuses and excites neighboring muscles. These neighboring muscles are frequently the physiological opponents of the affected ones, and the very ones of all others that it is undesirable to strengthen by unnecessary use or stimulation," etc.—Leslie Phillips, M.D., *British Medical Journal*, July 10, 1886.

It is just because electricity is carelessly used, as above said, that it either fails or does harm. That it can injure in cases instanced as above is preposterous. In the first place, stabile galvanism increases nutrition locally in muscles *without* interruption. Secondly, muscles *can* be isolated far enough to exclude any such ca-

lamitous injury as above described, and interrupted currents used to great advantage; and, thirdly, it is not necessary to use *strong* currents at all. Long-continued *mild* applications are preferable: they neither frighten nor fatigue the child, and they accomplish all that is required from electricity, as our hospital cases particularly indicate.

#### GALVANISM IN PRURITUS.

Breda gives (*Giorn. Ital. delle Mal. Ven. e della Pelle*) additional cases thus treated, in continuation of his former paper on the subject. Universal pruritus yields in four to six weeks' treatment, but how often applied he does not state. We find relief to follow much sooner under daily treatment, the cure being usually arrived at in a fortnight.

#### GALVANO-CAUTERY IN PROCIDENTIA UTERI.

Dr. John Byrne, of Brooklyn, has been treating procidentia with the cautery, and he finds the method preferable to others in most instances. His operation consists in drawing the uterus down and encircling the cervix with the wire loop just below the reflection of the membrane forming the vaginal vault. A groove about a quarter of an inch deep is then made, and glycerole of tannin tampons applied. In cases reported he claims that in two or three weeks after operating no reasonable force will depress the womb. The health in all instances was perfect thereafter, and menstruation normal and free from pain or inconvenience.

#### GALVANO-CAUTERY IN MEMBRANOUS DYSMENORRŒA.

In a Paris letter to the *British Medical Journal* of September 25, a paper by M. Landouski, read at the Medical Congress held at Nancy, stated his experience with the cautery in this affection, which was favorable. The cautery, (after full cervical dilatation) was lightly brushed over the endometrium, and the patient kept in bed a week.

This procedure was brought before the County Medical Society of this city by myself ten years ago, but the operation was deemed unadvisable by those who discussed my paper on dysmenorrhœa. The cases narrated at that time have *remained cured*, but my experience since is limited to two cases only, one much relieved, and

the other partially so. In these instances dilatation alone was unavailing.

#### HEMOSTATIC ACTION OF UTERINE FARADIZATION.

Ramas, of Brazil, in the *Bulletin Générale de Thérapeutique*, No. 1, 1886, gives notes of a case of constant hemorrhage following an abortion. No foreign body was detected in the uterus, and ergot, iron, injections, tampons, etc., were useless. Electricity then stopped the flow, one pole to the cervix, the other on the abdomen.

#### ELECTRICITY IN GYNÆCOLOGY.

At the recent meeting of the American Gynæcological Society, during the second day's session, Dr. Engelmann, of St. Louis, and Dr. W. H. Baker, of Boston, read papers on the general and special uses of electric treatment in this department. A report of the session is given in the *Times* for October 16.

From the discussion there and at other times, it is evident that much of the imperfect or bad results attributed to electrolysis depends upon confounding the value of galvanic with induction currents. The faradic machine cannot give the desired effect when electrolysis is desired, as its power here is almost *nil*. A study of Amory's valuable work, lately published in the current series of "Wood's Standard Library," would repay those who desire to employ electricity intelligently in all departments of practice.

#### NOVEL METHOD OF ELECTROLYSIS IN THORACIC ANEURISM.

Mr. Richard Barwell reports the details of a case in the *Lancet* of June last. The lesion was at the aortic arch, and failure of other treatment led to the employment of electricity, the case being in a critical state. The idea of diffusing the current widely *within* the sac led Mr. Barwell to introduce a long coil of steel wire. The wire was rolled on a wooden spool, and after introduction of course assumed a coiled shape. When the cavity was well filled, the current from eight elements was used, the positive to the wire, the negative on the dorsal aspect of the thorax. Resistance being too great, twenty additional cells were added, and the strength of current limited to ten milliampères. This was maintained for eighty minutes, causing no inconvenience other than slight redness of the back. For twelve hours

consolidation was not apparent, but then it rapidly increased, the tumor becoming quite hard, and pulsation almost ceased. The cough was much relieved, the general health appeared better; but in a few days a new tumor developed to the right of the sternum. The man died exhausted, and at the autopsy the coils were found to be coated by a thick coat of colorless fibrin, which bound the wire at many points firmly to the sac-wall.

Mr. Barwell points out the fact that the operation was undertaken too late, as the auxiliary tumor had shown itself two years before, and it was this one that ruptured. He believes, from the result, that his plan as here tried is greatly superior to the introduction of needles, as the clot is firmer, it is more extensive, and it is retained in place by the coil. The method is certainly worth extended trial; but, after all, the main point is prompt interference, and the time usually occupied in the administration of iodine, etc., is time lost.

#### MAGNETIC OPERATION ON THE EYE.

Dr. Jany, of Breslau, notes the removal of a steel splinter from the eye of a mason. The lids were intact, and slight ecchymosis on the upper edge of the cornea was present. The foreign body lay on the retina near the equator, a little outward from the vertical meridian, and it was apparently suspended by a fine, veil-like, white membrane. An incision in the conjunctiva under cocaine permitted the entrance of a fine pointed rod attached to a Voltolini electro-magnet, which was held near the chip for a few seconds before removal. The first attempt grasped the object, which was two and a half millimetres by one and a half by one-fourth, and three-edged. In three weeks the man was well, without scar, and his sight as good as ever.

Dr. Jany suggests a powerful magnet as more likely to attract at some distance, to hold the body if firmly embedded, and to save repeated attempts at removal. In this instance eight elements were employed to energize the magnet. The procedure is within the ability of any practitioner, in his opinion,—which opinion, however, we do not share.—*Deutsche Med. Wochensch.*

#### ELECTRICITY IN NERVOUS CARDIAC PALPITATION.

Meyer, Remak, Huchard, Eulenberg, Ziemssen, and others advocate galvanism



applied in different ways for the relief of nervous palpitation, and Duchenne advocates faradization. The latter, however, has failed in most cases in the hands of others than Duchenne. The experiments of Ziemssen show the effect of the constant current on the heart to be like that on striped muscle, and the poles applied to the thorax are as efficacious as in any other manner.

As stated in our last review, we do not favor direct electrization of the heart as described in that paper: but the anode may be placed on the neck (auriculo-maxillary fossa), the cathode over the præcordia. Skorczewski, in a paper on this subject, noted diminution of the apex-beat of from ten to thirty pulsations in a few minutes under galvanism. — *Zeitschrift für Therapie*.

THE EFFECT OF THE ELECTRIC LIGHT UPON  
THE EYE.

Dr. J. A. Andrews, of New York, read a paper on this subject before the recent meeting of the American Ophthalmological Society, contrasting the usual agents for producing light,—gas, oil, and electricity. Concerning in-door illumination, he finds that the maximum of light with the minimum of heat is obtained by the incandescent system of electric lighting. All cases of injury to the eye have, he states, been due to incautious exposure at close quarters to the arc-light. Out of eleven hundred workers using incandescent lights, not one case of injured vision was detected. Drs. Agnew and Mitten-dorf, of New York, corroborated the views of Dr. Andrews.

In one of the mills operated by a member of the writer's family, five hundred incandescent electric lights were, two years ago, introduced in the spinning department, in which very fine work renders the eye-strain great, and the improved work accomplished under the system is highly conclusive of the superiority over gas. The absolute steadiness, the whiteness, and the low heat radiated conduce decidedly to the comfort of the operatives, and finer grades of black are now produced at an increased rate in the same time under electric lighting when compared with gas. There is no doubt whatever in my mind, from close study, that improvement has taken place in the cases of a number of hands suffering from errors of refraction. Headaches, once common

from strain and heat, are now rare. The necessity for elevating gaslights above the machinery to avoid fire is done away with, and the loops are brought down below the former line, so as to hide the light from the eye, the porcelain disks throwing the most of the light downward, yet, from their translucent nature, permitting sufficient to pass upward for illuminating the room itself. The sense of security from fire, the knowledge that no injury can come from touching the fixtures, and the absence of heat have changed the hygienic condition so much as to make necessary the extension to five times the amount this winter, leaving the superiority of the light itself out of the question. Physicians in any way connected with extensive factories might improve the comfort and health of the employees radically by a little study of this subject.

Since writing the above, inquiry among compositors in two newspaper-offices here and in others in New York shows similar satisfaction as to the hygienic influence of incandescent electric lighting over gas. Much more work with less fatigue to the eyes is accomplished by printers now than before in the same establishments, and they particularly remark the lessened tendency to headache, which is not uncommon in such operatives.

THE RETARDATION OF RETINITIS PIGMENTOSA.

This, as a rule, incurable affection has, in the hands of Dr. Hasket Derby, of Boston, improved under galvanism, and similar testimony was given by Dr. Standish. Dr. William S. Little had decided improvement in one case under faradism, and Dr. L. Webster Fox found that the negative pole was the more efficacious.

ELECTRICAL DOSAGE.

At the recent meeting of the American Neurological Association much discussion was had, without coming to any conclusion, as to dosage, thickness of rheophore coverings, shape and size of rheophores, etc., all of which is hardly worth discussing. A reliable milliampère-metre, such as Fleming's or Barrett's, should always be included in the circuit when using galvanism, and the matter of thickness of coverings is simply one of resistance to be overcome by potential. A thin cover is just as good for most purposes as a thick one, and entails no waste, and, provided

that the current is not "very strong" (seventy-five to one hundred and fifty milliamperes), the lighter the cover the better. Caustic effect being avoided, we need care little for the points discussed, and the ultra refinement of theoretical electricians simply befogs inexpert men, who see in such disquisitions imaginary difficulties in practical work.

#### ELECTROLYSIS IN NÆVUS.

Dr. John Duncan, surgeon to the Royal Infirmary of Edinburgh, believes that the mixed and subcutaneous varieties of nævus are those specially adapted to this method of treatment. The certainty of cure without scarring on exposed parts is of much importance. Care must be taken to avoid a cutaneous slough: hence not too much should be attempted at each sitting. He prefers steel needles insulated with vulcanite, about a quarter of an inch of the point being exposed. Both poles are introduced, and an anæsthetic is used, the burning being severe.—*Braithwaite*, July, 1886.

Dr. A. Mayor, of Geneva, Switzerland, reports a cutaneo-subcutaneous case of nævus in a girl of 10 months, in which two sittings were successful in destroying the erectile tumor. The mass was the size of a nut, and four years after removal the child remained well and free from scar.—*British Medical Journal*.

#### IMPROVED AND NEW APPARATUS.

Dr. Rudisch has devised an arrangement by which a mass of asbestos is clamped between the collective and distributing plates, which after immersion for a time holds sufficient moisture to energize the couples for a month. The cells can hence be left at home, at least in zinc-carbon elements (or any single-fluid cell), and portability is thus enhanced. The plan is somewhat similar to that noticed in our review of March 6, 1886, in which agar-agar is employed by M. Guérin. With asbestos-paper internal resistance would not be heightened, however, as it is by the former plan.

#### IMPROVED GRAVITY CELLS.

Those who employ the ordinary Callaud cells are aware that carelessness in handling them is destructive to the separation of the liquid contents. Any injudicious blow on conjunctive wires is certain to stir up the cupric sulphate, and, as the zinc should never be touched by this solution, the

waste thus caused is expensive. The Partz Electric Company has produced a cell (shown in the illustration) which cannot be disturbed thus, and which not only possesses the advantages of the gravity system, but, in addition, is of much higher electro-motive force. The couple may be of zinc and copper, but that shown is preferable, and is of zinc with a large carbon plate. The upper side of the latter is enlarged by numerous studs to give increased surface. In putting up a battery of this kind the glass jars are to be filled, just high enough to cover the zinc plates, with a solution of either an alkaline sulphate, preferably that of magnesia (one part in four parts of water), or an alkaline chloride, preferably that of ammonium (one part in five parts of water), each cell requiring about forty-five fluidounces. To these solutions may be added from five to ten per cent. of hydrochloric acid, which lessens the internal resistance, but causes some local action on the zincs. The depolarization is effected by means of a "sulpho-chromic salt" made and furnished by this company. Of this salt, in which sulphuric acid has been caused to combine with chromic acid in an amorpho-crystalline state, equal portions are dropped into the several glass tubes, whereupon the carbon cathodes soon become covered with a dense stratum of depolarizing liquid, which maintains therewith the energy of the apparatus, and it is only necessary to renew the supply at intervals.

The electro-motive force of a cell is about 1.95 volts. Its strength of current is:

With a solution of sulphate of magnesia.....	3	ampères.
" " chloride of sodium.....	5.5	"
" " ammonium.....	6	"

An addition of ten per cent. of hydrochloric acid increases the strength of current of a cell:

With a solution of sulphate of magnesia to	5.25	ampères.
" " chloride of sodium.....	6.6	"
" " ammonium.....	7	"

For ordinary use in the office the addition of the acid is not required, and the depolarizing material is added from time to time according to the demand required of the battery, and no interruption is caused by so doing. The zincs may remain in the liquid, unless the battery is unused for long periods, when they should be raised and supported by pins through the rods which are fitted for that purpose.

The Acid Gravity Battery has proved of excellent service in its application to electro-magnetic dental mallets, which are satisfactorily operated by four cells. Its efficiency and great convenience render it equally well suited for surgical and dental glow-lights, for cautery (from four to six cells), and there is no voltaic apparatus better adapted to the wants of a chemical or physical laboratory.

Another modified cell is that suitable for portable batteries and for intermittent work on circuits of high resistance. In the Leclanché, once the electrolite is ex-



hausted, the cell must be replenished at the factory, but this can be renewed by the owner by soaking the cathodes in hot water and adding the depolarizing salt. The initial electro-motive force is 1.6 volts, and a current-strength of 2.8 amperes per cell. The carbon cathodes are slotted to increase their surface, and double anodes are employed, connected by the zinc cover, which screws down tightly to prevent evaporation and efflorescence. The element is very constant, and does not run down so rapidly as the ordinary ammonium chloride cells. The finish, as shown by the cut, is excellent. The measurements were made by Professor Dolbear, and his results have been verified by the writer.

#### STATIC ELECTRIC MACHINES.

The Toepler-Holtz machine, made by Messrs. James W. Queen & Co., of this city, noticed in a recent review,\* has been still further improved, and in stability, promptness of working, and ready adaptation to direct and the so-called "secondary induction discharge," it is believed to be unequalled by any other for either medical or experimental work.

In muggy or very hot weather the best static-electric machines are difficult to operate satisfactorily, and to overcome this defect various methods are employed. The better way to insure dry plates is to isolate the machine from the surrounding atmosphere, and Messrs. Queen & Co. have devised an air-tight glass case which serves the purpose admirably. The operation of the revolving plates may be maintained either by the crank with hand-power or by the treadle and spring. Beneath the case compartments are arranged to hold rheophores and chains or other accessories, and, if desired, a vessel of anhydrous sulphuric acid or chloride of calcium may be placed within the case to dry the contained air thoroughly.

The case can be fitted to any Toepler-Holtz machine, and thus arranged static electricity is controlled as readily as is the Ruhmkorff coil.

#### INTERRUPTER, COMBINER, AND CURRENT-REVERSER.

Dr. De Watteville, of London, has written to say that the switch illustrated in our review of July 10 last was introduced by himself several years ago. We take pleasure in correcting the unavoidable error on our part in reference to its invention, as the English attachment had not been seen at the date of writing, and we had inadvertently overlooked the illustration in the second edition of the distinguished author's classical work on medical and surgical electricity.

246 NORTH TWENTIETH STREET.

#### FOR LEUCORRHOEA.—

R Potassii chloratis, ʒiij;

Tinct. opii, fʒiij;

Aq. picis liq., fʒviij. M.

Sig.—One to three teaspoonfuls in a quart of warm water, to be injected morning and evening.

\* Philadelphia Medical Times, March 6, 1886.

## NOTES OF HOSPITAL PRACTICE.

## PENNSYLVANIA HOSPITAL.

## CASES FROM DR. MORTON'S CLINIC,

Held October 23, 1886.

*RUPTURE OF LONG TENDON OF THE BICEPS MUSCLE, DUE TO MUSCULAR EFFORT—SUTURE, AND SUCCESSFUL RESULT—ANTI-SEPTIC APPLIANCES.*

THE patient is a laboring-man, about 50 years of age, who came here three days ago, with a rupture of the long tendon of the biceps muscle of the right arm. He was at work in a pit ten feet in depth, standing at the bottom and throwing shovelfuls of dirt out of the top, when suddenly he experienced a sharp pain in his shoulder and was unable to continue at his work. I found upon examination of his arm that the long tendon of the biceps had been ruptured. The muscle was firmly contracted and in a state of spasm. I cut down upon the muscle and found its tendon coiled up upon it like a worm. I cut off the frayed end of the tendon, and, replacing it in a deep groove that I had cut in the deltoid (which I had exposed to the acromion), I stitched it deeply into the tissues of this muscle with catgut interrupted sutures. The usual dressings were applied, and the arm kept in a sling. That was sixteen days ago. The dressings have not been disturbed since; they will now be removed. You see the line of the incision, which has perfectly united. Some remnants of catgut sutures are lying upon the dressings, which are perfectly dry. Although the wound has healed, we will not allow the man to use his arm yet; he should not go to work again for another fortnight, but there is no need of keeping him in the hospital. He can report at the Out-Patient Department, and carry his arm in a sling until the newly-united tendon has united firmly in its new location.

Two cases came in on last Thursday afternoon which I regard as crucial tests of aseptic surgery: they will now be brought before you.

*GUN-SHOT WOUND OF THE POPLITEAL REGION.*

The first man was shot thirty hours before his admission, while in the mining regions, and received a wound in the popliteal space, which at the time was accompanied by excessive hemorrhage: a

pistol-bullet had not been removed from the wound. Upon examination I came to the conclusion that the ball must have injured the important deep structures, since the wound was directly in line with the large blood-vessels and nerves, and that it had possibly entered the joint. Sensation in the parts below was preserved, but there was no pulsation in the anterior tibial artery or its branches in the foot.

With antiseptic precautions, I opened the popliteal region, and found the ball lying some distance beyond the artery, it having also injured the knee-joint. The bullet, which was from a Smith & Wesson revolver of .32 calibre, had completely divided the popliteal artery, and had wounded but had not opened the accompanying veins. The divided ends of the torn artery were carefully isolated; the proximal end was filled with clot, the other end was patulous. Both ends were securely tied, in order to prevent secondary hemorrhage. I used catgut ligatures, which were cut short, and the wound was then closed in the usual way and a rubber drainage-tube was inserted. The patient, since the operation, has been perfectly comfortable. An injury of this kind, involving a divided main artery and a joint involved, has always been considered very grave, and one which under other forms of treatment might, and probably would, demand an amputation. I need not now stop to point out the great difference between the results of treatment by former methods in these grave cases and those which we have obtained here by strict antisepsis.

*DISLOCATION OF THE KNEE, WITH LACERATION.*

The second case is one in which the knee-joint was entirely exposed by a fall, which ruptured the old inflammatory adhesions that had been thrown out in nature's attempt to unite by new tissue a ruptured quadriceps more than a year ago. The skin and deep tissues were so torn as to expose the condyles of the femur and the articular surface of the tibia, the lateral and crucial ligaments were torn, and the wound of the soft parts around the joint was so extensive that the leg was held only by a posterior flap, in which, however, the vessels and nerves were preserved intact. I made lateral vertical incisions upward four inches in length on either side, just as if I were going to perform an amputation, and so



was enabled to lift up the tissues and to clean out the knee-joint and adjacent wound with a douche of one to one thousand solution of corrosive sublimate: all clots were carefully removed, and the wound-surfaces thoroughly curetted. I then brought the parts together with about twenty interrupted catgut stitches, and dressed the wound antiseptically as already described. His temperature this morning, forty hours after the operation, is only  $100\frac{1}{2}^{\circ}$ , and his general condition is good. When you consider the character of the case,—that he was in a bad condition, that he has been a drinking man, and that he was under the influence of liquor when he received the injury,—I think you will agree with me that the result thus far has been remarkable. The object of the treatment was to seal up the joint and to prevent the occurrence of irritation and suppuration by the exclusion of all micro-organisms.

The next case is one of contusion of the upper part of the thigh, with a very large hæmatocele, just above the knee, of one week's duration. I shave the part thoroughly, wash it clean with bichloride solution, and cut open this sac from one end to the other, and my incision is five inches in length. I turn out the clot and wash the wound with a one to one thousand solution of corrosive sublimate: with a sharp spoon I am now scraping the walls of the cavity, so as to remove all disorganized shreds of tissue and blood-clots. This having been done, I unite the edges of my incision with interrupted catgut sutures, and apply a compress of gauze wet with the same solution. Iodoform is thickly dusted over the wound, and absorbent cotton, previously washed with the mercuric-chloride solution, is next applied, and retained in place with a bandage wet in the chloride solution. A few strands of catgut ligature are placed in one angle of the wound so as to admit of drainage, and a straight splint is placed on the back of the limb to insure rest.

*TEALE AMPUTATION OF THE LEG FOR DEFORMITY.*

The next case is a man from the mining regions upon whom I will perform a Teale amputation. About a year ago he was injured by a falling mass of coal, which crushed his right heel. This accident was followed by prolonged suppuration and ulceration. As a result there is contrac-

tion of the plantar fascia and of the gastrocnemius muscle to such an extent that he has an acquired talipes equinus; the foot is permanently extended, so that he walks upon the base of the big toe; ankylosis of the tarsus and ankle-joint has taken place; the sole of the foot is covered only by a thin skin or scar-tissue, which is adherent to the bone beneath.

The only remedy for this state of affairs is amputation and an artificial limb.

It is always best before making a Teale operation to measure carefully the size of the flaps and mark their outlines with iodine or the point of the knife. You should never trust simply to your eye.

Proceeding now to the operation, the limb is first washed with soap and water and carefully shaved. It is next bathed with the one to one thousand solution, and towels wet with the same are placed around the limb above and below the line of operation. The hands of the surgeon and assistants are also disinfected, likewise the Esmarch bandage. The knives and other instruments for the operation have been boiled in water, and are kept in a tray under a weak solution of carbolic acid, because the corrosive chloride would act upon the steel and dull them.

The limb at the point of amputation measures ten inches exactly. The long flap then will be five inches in length and breadth. I will take it from the outside external aspect of the limb, because there is more healthy tissue here. The short flap I will now mark one and one-fourth inches long and five in breadth. All the soft parts help to make up the flaps, which are now separated from the bones and the tibia and fibula divided; the wound is washed with the same solution of bichloride, and the vessels are secured with catgut ligatures, which are cut short. Some strands of catgut, instead of rubber tubes, are placed in the lower angle of the wound, and the flaps are brought together with catgut sutures.

The same dressing, of bichloride gauze thickly dusted with iodoform, is applied as in our other cases,—first having placed a strip of silk protective over the sutures, then a layer of absorbent cotton, which has also been treated with the one to one thousand corrosive-sublimate solution; the dressings are kept in place with a wet bichloride bandage. Unless something unusual occurs, indicated by a rise in temper-

ature (which shall be carefully recorded morning and evening each day), this dressing shall not be disturbed for three weeks. I will then bring him before you again and show you the result.

In case a rise of temperature occurs, first find out if this is due to some intercurrent malady. In September last, forty-eight hours after a serious operation, the temperature of one of my patients rose to  $103^{\circ}$ . An examination showed a sharp attack of diphtheritic tonsillitis, from which the patient soon recovered, but which in no wise affected the wound, which was not opened for several weeks, when it was found quite united, as in those you have seen.

#### ANTISEPTIC APPLIANCES.

My son, Dr. Thomas S. K. Morton, Senior Resident Surgeon at the Pennsylvania Hospital, has presented me with the following details, which I regard as so important that I have concluded to add them to the report of my lecture.

The antiseptic *dressing* is only the ending of a series of manipulations upon, and applications to, a part before, during, and after an operation. *Per se*, it is almost valueless unless all the necessary details leading up to its application are thoroughly carried out.

Entirely disregarding theory, what is aimed at is to have the field of an operation, upon its completion, free from any substance which can become an irritant or develop fermentation; then to apply some form of dressing which will entirely prevent access of such material to the wound.

Since its first introduction by Lister, the term antiseptic has been made to embrace every procedure likely to prevent such wound-complication, and its range of applicability is rapidly on the increase.

No one dressing or system of antiseptics can yet be spoken of as best: their name is almost legion. The object which it is essential that we shall keep in view is the antiseptic principle: its details of application may be varied.

Hospitals are the only places where comparative tests of such details can be made, and I present below a list of those in present use in the Pennsylvania Hospital. These are the result of much comparative work, experimentation, and investigation, and it is hard to conceive how our wounds could do better than they do.

*Cleansing of Parts.*—Carefully shave the field of operation and its surroundings; hair grows everywhere except on the palms and soles,—an exception to the above rule,—and is very tenacious of dirt. Then rub well with turpentine or ether, then soap, and a final wash with the one to one thousand bichloride solution. Special pains should be taken to cleanse such parts as the ear, umbilicus, toes, axilla, and groin. If the operation be in the auricular region, wash the pinna of the ear as thoroughly as possible, sprinkle the canal full of iodoform, and put in a small wad of bichloride cotton on top; the cotton, if it become soiled, can be removed before the dressing is applied.

For special occasions, the operative field and its surroundings can be thus treated beforehand and then wrapped in either an antiseptic dressing or in towels wrung out of one to one thousand sublimate solution. A simple irrigation of one to one thousand solution will only be required at the time of operation after this preliminary cleansing. An oil-cloth should be placed under the part to be operated upon and wet with the one to one thousand douche. So also towels wrung out of the same solution should surround the field and cover any part which the operator is liable to touch or lay instruments upon.

*Arrest of Hemorrhage.*—Great care must be exercised in the ligation of bleeding points. Invariably the catgut ligature should be used for this purpose, unless the vessels are very near the surface and can be stopped by running a stitch through or under them. The catgut which we use is procured either from wholesale dealers in musical supplies, or from importers. Five sizes, running from the finest made to the largest cello string, are all that can be needed for any surgical purpose. To prepare this material properly, the commercial gut should be soaked in oil of juniper for forty-eight hours, washed in alcohol, and stored in the same. The oil of juniper removes the animal oil, so that it becomes quickly pliable in aqueous solution, antiseptic, and will be absorbed in from seven to ten days, according to size.

Stronger and more durable catgut can be made, if desired, by means of chromic acid. The formula is as follows: Take twenty parts of water, one part of carbolic acid,  $\frac{2}{10}$  part of chromic acid, and to this mixture add one part of catgut as prepared above. Let it stand for forty-eight

hours, wash in alcohol, and preserve in the same. This gut, according to size, will resist absorption from ten to thirty days. In tying catgut, all difficulty will be overcome if the first knot be made a surgeon's knot.

**Drainage.**—If care has been taken to arrest bleeding properly, there should be very little material poured into even the largest wounds after their closure, for bichloride, unlike carbolic acid, produces very little tendency in a wound to ooze.

In a properly-managed wound, all possible discharge should be over by, at most, the third day. Various means are employed to accomplish the drainage of this actual, or possible, discharge of bloody serum into wounds. Principal among these are bunches of fine catgut and perforated tubes of rubber, decalcified bone, or parchment. I cannot yet speak with positiveness of more than the first two mentioned. The latter and others are still under trial. Catgut in hanks of from three to twelve strands can be depended upon to drain most wounds which are expected to heal by primary union, even the largest. But if the surgeon has not sufficient confidence in it, the rubber drains may be used, but should be early withdrawn. This is their worst objection, as to accomplish it the whole dressing has to be removed at the most critical time in a wound's healing. Catgut will not, as a rule, drain pus, as it operates by capillarity; hence tubes must be used for the drainage of antiseptically-treated ineradicable abscesses, etc.

The catgut drains, which are made up of fine threads, are absorbed in from seven to ten days.

The rubber tubes are kept in three-per-cent. carbolic acid solution.

**Irrigation.**—This is kept up from time to time during an operation where antiseptics is possible; it will do no harm in any operation, and probably some good where cleanliness is impossible. It is accomplished by a small stream of the one to two thousand solution directed from a vaginal, Thudichum, or other douche apparatus.

One to two thousand is our standard solution for this purpose, and multiplications or divisions of that strength are made up for special occasion. For example: one to two thousand for wounds filled with dirt; one to twenty-five hundred for

poison-wounds, such as dog-bites; one to five thousand or ten thousand for abdominal work. Of course, the latter two are to be washed out by much weaker solutions or by distilled water *ad libitum*.

**Sponges** are used but once, and then destroyed. We buy them in twenty-five-pound bales, and bleach and purify them by the following process.

Soak in ten-per-cent. hydrochloric acid solution for twenty-four hours, wash thoroughly, and place for an hour in a solution of permanganate of potash, one hundred and eighty grains to five pints of water. Take out, squeeze, and drop into this mixture: dissolve ten ounces hyposulphite of sodium in sixty-eight ounces of water, and filter. To this add five ounces hydrochloric acid. Put in sponges, and leave until thoroughly bleached; then wash them *most thoroughly*, and store in one to one thousand of corrosive sublimate. When ready for use, they cost about three-fourths of a cent each.

**Instruments and Apparatus.**—Our instruments are invariably boiled after an operation, and, if possible, before. When the latter is done, they can safely be used directly from the water as it cools. Usually they are kept immersed in a three-per-cent. solution of carbolic acid.

Needles, also pins liable to penetrate deeply into the dressings, should be kept in three-per-cent. solution of carbolic acid in glycerin. Instruments can be permanently kept in this solution without damage. Nail-brush and soap should be used on all instruments both before and after operation. All apparatus, such as tourniquets, etc., which may come in contact with the wound or its unprotected vicinity must be previously soaked in either corrosive sublimate or carbolic solution.

**Closure of Wound.**—The details of this usually neglected proceeding are of great importance. Wash thoroughly with the mercury solution. Remove the larger clots; the smaller will organize or be absorbed. Adjust an appropriate drain, and suture with catgut of the proper absorbability. If the wound be deep, it should be sewn structure to structure from the bottom upward. The skin and immediately subcutaneous tissues sew with very closely placed interrupted or continuous sutures of the same material, taking care to leave sufficient room at the drain-exit for its proper working.

**Protective** is a substance employed to

keep the irritating dressing from direct contact with the newly-formed repair-cells. It is simply fine oiled silk, coated with a preparation of copal varnish, dextrine, and carbolic acid. This is merely to prevent its shedding water, etc., as ordinary oiled silk does. It is laid in a narrow strip along the suture-line, overlapping it about one-half inch on either side. It is of much more importance where the edges of the wound do not approximate. In that case, if the area to be covered is large, a series of narrow strips is better than one large piece, as it allows of immediate drainage into the antiseptic materials of the dressing. The protective should cover in the ends of the catgut drains, so as to keep them moist and in working order. In removal of the dressing it prevents drawing upon the stitches, etc. It is kept in air-tight glass jars and dry. When wanted, cut off a sufficient amount and place in corrosive or carbolic solution.\*

*Dressings.*—Our principal dressing consists of the gauze of Lister (cheese-cloth impregnated with this mixture while hot: carbolic acid, one part; resin and paraffine, each four parts) wrung out of one to one thousand bichloride solution, in which it is kept. It is cut so as to overlap the wound considerably, and its skin-surface thickly covered with iodoform sprinkled on with a salt- or sugar-duster. Bandages which are to be put on wet with this solution are made from the same gauze. In a small wound eight layers of the moist gauze bound on with a gauze or ordinary roller is all that will be required. If the wound be large or liable to ooze, a considerable pad of bichloride (one to one thousand) dry absorbent cotton is superimposed, and the gauze-bandage placed over all.

### TRANSLATIONS.

**COTO BARK AND COTOINE IN DIARRHOEA.**—In a note read before the Société de Thérapeutique, Paris, Dr. H. Huchard reported his experience in the use of cotoine in diarrhoea. Coto bark was introduced into Europe in 1873 from Bolivia, where it had been employed in gout and rheumatism, but especially in the treat-

ment of diarrhoea. Jobst, of Stuttgart, in 1875 succeeded in isolating the active principle *cotoine*, and from an allied species he obtained a similar one, to which he applied the name of *paracotoine*. Cotoine crystallizes in yellow four-sided needles, resembling commercial gallic acid. It melts at 130°, is soluble in warm water, chloroform, ether, alcohol, and sulphide of carbon, and slightly soluble in cold water, petroleum, and benzine. It is likewise dissolved by alkalies, yielding a yellow color; with sulphuric acid it is yellowish brown, and with concentrated nitric acid strikes a blood-red color. This reaction enables it to be recognized in the urine in from seven to ten hours after its administration. Paracotoine is less active than cotoine, is scarcely soluble in water, and does not give the color-reaction with nitric acid. Coto bark also contains, according to Jobst and Hesse, other principles,—*oxyleucotoine*, *leucotoine*, and *hydrocotoine*, the therapeutic effects of which are less marked than those of cotoine.

The physiological action of cotoine has been studied by Pibram, Benkart, and Albertoni. It has antiseptic and antiputrefactive properties; it stimulates appetite and gastric digestion, and does not cause constipation. It was given in relatively large (1.50 G.) doses to rabbits and guinea-pigs without producing marked toxic effects. The most decided property of cotoine is the dilatation of the vessels of the intestinal walls (Albertoni) following its administration, and the consequent improvement in nutrition of the mucous membrane.

Therapeutically, cotoine has been found valuable in diarrhoeas of all kinds. Even in typhoid fever and in cholera it has been employed with some success. Huchard has administered it hypodermically, as recommended by Bourneville and Bricon, but with unsatisfactory result. He prefers the powders by the mouth, containing twenty centigrammes, of which two or three should be given daily.

The results obtained in twenty-one cases were as follows. In ten cases of diarrhoea with tuberculosis (three of which had intestinal ulceration), in eight of catarrhal diarrhoea, and in three of arthritic diarrhoea of four months' standing, the cotoine was given as directed, and with success in all except two cases of tuberculosis. Frommüller, out of ninety-three cases of diarrhoea following typhoid fever, noted

\* At my suggestion, Mr. Geo. J. McKelway, 1412 Chestnut Street, will furnish complete sets of these dressings, all ready for use, in a convenient case.



only nine cases of failure. Parsons, Burney Yeo, and Rohrer have also used it with remarkable success in infantile diarrhœas. These results are sufficient to assure cotoine a high position in therapeutics.—*Bulletin Générale de Thérapeutique*, August 30.

**NOCTURNAL INCONTINENCE OF URINE IN CHILDREN.**—Dr. Picard has found prompt results follow the application of faradism, one pole being applied to the perineum, the other over the abdomen in the hypogastric region, or in the rectum. In some cases it was necessary to introduce one of the poles into the urethra, the other into the anus. The current was passed for from two to five minutes, either daily or every second day. Internally, iron may be given in combination with ergot or strychnine. Hydrotherapy is a powerful tonic, but should be administered with caution. Sea-water baths are especially useful where the patients are lymphatic or scrofulous, and sulphur-baths for nervous children. If the incontinence be associated with or dependent upon vesical inflammation, the injection of nitrate of silver (one or two grains to the ounce of water) may be practised with advantage. When the urine is decidedly acid or of unusual density, diluent or alkaline solutions (sodium bicarbonate) may be drunk. The child should be taught to extend the time between the acts of urination during the day, so as to reduce the sensibility of the bladder and train it to tolerate the presence of urine for a longer period. Of course, due attention is to be given to eating and drinking, especially at the evening meal. In some cases moral treatment, in the shape of corporal punishment, is very effective, and gives a better result than medicine.—*Le Progrès Médical*.

[Before recommending the rod, the physician should ascertain whether or not the cause may not be beyond the child's control, as, for instance, where it is due to albuminuria, diabetes, or ascarides.—ED. P. M. T.]

**MASSAGE IN CERTAIN FRACTURES PREFERRED TO IMMOBILIZATION.**—In a communication recently read before the Société Médicale des Hôpitaux, M. Just Lucas-Champonnière gave expression to the following conclusions:

Immobility in the treatment of some fractures is habitually much too prolonged and much too general.

In intra- and para-articular fractures it is accompanied by decided dangers.

Except in cases of great primary displacement, fractures of the radius and fibula do not need fixed dressings.

Massage relieves pain and favors repair.

Passive motion prevents stiff joints and subsequent lameness or pain.

Massage properly conducted acts well from the beginning, and can be continued in conjunction with other treatment. By its means the length of treatment is materially reduced.

Fractures in the vicinity of large joints are less suited for primitive massage, but they unite very well without immobilization, and passive motion and secondary massage are very successful in hastening union.

Fractures complicated with wounds of the soft parts treated in the same manner have furnished results which the old treatment, in the author's experience, had never afforded.

Finally, the complications, neuralgic pains, and crippled or weak limbs are due generally to the immobilization of neighboring joints: in these cases no treatment can compare with massage for the removal of pain or the restoration of function.—*Revue de Thérapeutique Méd.-Chir.*, No. 15.

**WARTS CURED BY INTERNAL MEDICATION.**—M. Colrat reported a series of cases to the Lyons Society of Medical Sciences, illustrating the treatment of warts by magnesia taken internally. Several children to whom ten to fifteen centigrammes (two to two and a half grains) twice a day were administered were promptly cured; others proved refractory for several months; while others still were absolutely unaffected by the treatment. Even large warts (not polypiform) have fallen off under this medication. The well-known tendency to contagion—i.e., from the hand to the face—has been attributed to a specific cause; and M. Cornil has found a microbe in tissue of the little growth. M. Aubert reported the case of a woman whose face was covered with warts, though none were found on her hands. She recovered entirely after the administration of magnesium sulphate—six grammes daily—at the end of six weeks. M. Roux mentioned a case having large and numerous warts cured in fifteen days by the administration of fifty centigrammes daily.—*La France Médicale*, October 16.

PHILADELPHIA  
MEDICAL TIMES.

PHILADELPHIA, NOVEMBER 13, 1886.

EDITORIAL.

THE MALARIAL BODIES OF LAVERAN.

THE observations of Laveran on the presence of certain organisms in the blood of patients suffering with malaria are being confirmed on all sides. The Italian observers Marchiafava, Celli, and Golgi, whose opportunities for the study of paludism in all forms are unequalled, have found essentially the same changes, and in this country Councilman, of Baltimore, has determined their presence in all cases of malaria examined by him.

At the conversational meeting of the Pathological Society of Philadelphia, November 3, Dr. Osler communicated the result of a study of the blood in over fifty cases of ague, and he too finds the bodies described by Laveran to be constant features. At the Washington meeting of the Association of American Physicians, if we remember rightly, Dr. Osler expressed himself rather doubtfully as to the nature of the bodies he had seen, but further study has evidently convinced him of their parasitic character.

He described the bodies as occurring both inside the red corpuscles and free in the plasma. The intra-cellular form appears as either a hyaline or a darkly-pigmented body, filling one-third or one-half of the corpuscle, and undergoes slow amœboid changes. The hæmoglobin of the corpuscle is gradually destroyed by the organism, and the stroma becomes pale and finally colorless. There seems to be no doubt whatever about the amœboid character of these movements, which are readily followed with a high-power objec-

tive. The forms occurring outside the corpuscle are still more remarkable. These are (1) small, circular, pigmented bodies, (2) curious crescent-shaped organisms, and (3) an extraordinary flagellate body resembling an infusorian. The pigmented crescents have been noted by all observers, and are much more readily seen than the amœboid bodies. They do not occur so frequently, and apparently only in the later stages of the disease. The flagellate form, also pigmented, is still less common, and was seen by the lecturer in only six cases. The movement of the flagella is very active, so that it brushes away the red corpuscles in its vicinity.

The relation of these forms to one another is still doubtful, though they probably represent phases of development of the same organism. He also described a segmentation in certain forms, which, if followed, may give a clue to the life-history. In the absence of fuller details, it seems impossible at present to classify the organism, though its affinities are evidently with the flagellate infusoria. Marchiafava and Celli have suggested for it the name *plasmodium malariae*.

Dr. Osler did not seem prepared to give a positive opinion as to their causal connection with the disease. They do not, like the spirillum of relapsing fever, occur only in the paroxysm, but appear equally abundant in many cases both before it and after. The acute cases, however, seem to have the pigmented bodies in the corpuscles, while the more chronic forms have the crescents. Perhaps the most important point at present with reference to these bodies is the valuable aid they afford in diagnosis. The cases mentioned by the lecturer, and also by Dr. Musser, in the discussion, illustrate the importance which these bodies may hereafter assume in the detection of doubtful cases.

Another most interesting feature is the influence of quinine in reducing their number in the blood and finally destroying

them altogether. To us this seems one of the strongest arguments in favor of the causal relationship of these bodies and the disease. It is well for us, however, to be cautious. We have not yet forgotten Salisbury's palmella or Klebs's bacillus malarie. These malarial bodies of Laveran, however, are readily demonstrated, and the studies of five or six independent observers in different parts of the world practically agree, so that we may reasonably hope that at last we have something tangible, which further observations will show to be intimately connected with the production of the disease.

#### PRACTICAL ASEPSIS AT THE PENNSYLVANIA HOSPITAL.

**I**N a general way, every practical surgeon has become familiar with the fact that the introduction of Listerism—by which we understand the application of means with the definite purpose in view of preventing sepsis in wounds—has within the last ten years given a great impetus to operative surgery. Operations within the peritoneal cavity, and upon the brain, which defied the skill of a preceding generation of surgeons, are now not only rendered legitimate, but also are performed successfully almost daily. The advantages of antiseptics in wound-treatment have been so fully demonstrated that several European governments have included packets of antiseptic material in the individual military outfit, in order that the soldier may carry with him upon the battle-field appliances for the primary dressing of wounds.

Notwithstanding the fact that proofs of the superiority of the new and only scientific methods over the old have accumulated until they appear logically irresistible, we find that many surgeons still conduct their practice, both hospital and private, according to the routine and empirical methods of a score of years ago. Others apply them in part or inefficiently, and

therefore only invite failure and bring discredit upon the system by their neglect.

At the Pennsylvania Hospital during the past six months it is claimed that the aseptic method of wound-treatment has been carried out systematically and completely in the service of Dr. Morton. Some of the results we have already laid before our readers. We do not exaggerate in making the statement that the introduction of the aseptic system of dressings has revolutionized the system of wound-treatment in an institution which has always been noted for its strict cleanliness and successful surgery. Erysipelas and septicæmia have been banished from the wards, and even suppuration is now rarely permitted to occur. Some of the results may be mentioned for purposes of comparison. Amputations, as the rule, are dressed only once, and retain the original dressing until the expiration of three weeks: elevation of temperature rarely occurs, even after grave operations. In a lacerated wound of the knee, opening the joint and tearing the ligaments and skin, the dressing was not removed until the seventeenth day; no suppuration had occurred, the temperature remained about normal, and the wound was found perfectly healed upon removing the dressings. Two cases of compound depressed fracture of the skull recovered in a few days as though from a simple wound of the scalp. A ruptured tendon of the biceps was replaced and stitched deep within the deltoid muscle, and the wound united by first intention, with restoration of function. An excision of the cuboid bone for distortion of joint in a case of club-foot was equally successful. These results are simply perfect. The details of the method of wound-treatment which accomplishes such results must be of the greatest interest to the profession, and we therefore are glad to be able to give them, through the courtesy of Dr. Morton, on another page.

Dr. Morton very justly says that there may be many other ways of securing immunity from wound-infection, and that he does not insist upon the methods practised by him as being the best for all, although he has found them the best for himself; but he desires to lay especial stress upon the fact that, unless means are adopted which secure complete asepsis, Listerism is not practised. Partial antisepsis is not antisepsis at all.

The question is pertinent concerning the possible medico-legal complications arising out of the new surgery. If wounds made in the course of major or minor surgical operations can be kept absolutely aseptic, and the means are well known and open for all to adopt by which this end may be attained, what responsibility will attach to a surgeon who neglects to adopt antiseptic precautions, if his patient suffer subsequently with suppuration or septicæmia? A few suits for malpractice would have the effect of stimulating the interest of surgeons in the new surgery. Will they be needed?

#### SOCIAL AND UNSOCIAL MEDICAL SOCIETIES.

AT the meetings of the American Medical Association and other national organizations the Committees on Entertainment have important functions, and the success of the meetings is largely dependent upon the proper performance of their duties. It would be a consummation devoutly to be wished that every medical organization would appoint a standing committee on the "Promotion of Sociability among its Members." We have attended meetings which were quite the reverse of social in their tone, and we feel sure that the systematic cultivation of the amenities under the direction of an active committee would largely increase the attendance at our medical societies.

Some of the prominent medical practitioners of Baltimore, at the suggestion of Dr. George H. Rohé, have organized a medical society there which holds monthly social meetings, at which a good dinner is the principal subject of discussion. It is appropriately called the "Flint Club," in honor of the late Professor Austin Flint, who was eminently social in his tastes. By such means good fellowship, friendly intercourse, and mutual regard can certainly be advanced in the profession. It is suggested that Flint Clubs might well be instituted in other cities where similar social medical organizations either do not exist or are confined to the alumni of a particular school, or are otherwise exclusive to the general practitioner.

#### NOTES FROM SPECIAL CORRESPONDENTS.

##### PARIS.

*THE French Surgical Congress.*—The second annual session of this new institution was opened on the 18th instant, under the Presidency of Professor Ollier, of Lyons, and the Vice-Presidency of Professor Verneuil, of Paris, who will preside next year. The meetings are held in the grand amphitheatre of the Faculty of Medicine, which is fitted up with considerable taste under the directions of Professor Pozzi, who is the General Secretary to the Congress. On opening this session, Dr. Ollier said that the young Association, now in its second year, would be sure to meet with great success, which was already in fact guaranteed to it by the large number that have already united with it, not only French surgeons, but also those of foreign countries. The International Congresses, he said, give splendid results, notwithstanding the difficulties involved by the diversity of languages: what, then, may not be hoped from a Congress using the French language only? In closing, he insisted on the necessity of division of work in our scientific medical studies, and he said that specialties must continue to be produced, and that they should form associations in order to elaborate and concentrate their ideas.

The first paper read was that of Dr. J. Reverdin, of Geneva, "On Accidents consecutive to Extirpation of the Thyroid Gland."

M. Thiriar, of Brussels, followed with "The Importance of daily determining the Quan-



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**IN LEUCORRHEA**, with thick, albuminous discharge, like the white of an egg, use locally by injection, 1 to 4 drs. to 1 pint of water, 3 or 4 times per day.

**IN ULCERATION OF THE CERVIX UTERI AND VAGINA**, with tenacious discharge, place in contact with the inflamed surfaces cotton saturated with Fl. Hydrastis, 2 to 4 drs. to Glycerine 4 oz.

**IN STOMATITIS**, pseudo-membranous, ulcerative, or gangrenous, when the inflammation is subacute or characterized by profuse secretion of ropy mucus, use as a gargle or wash in proportion of 1 to 2 drs. to water 4 oz. When the breath is offensive, Pot. Chlorate or Baptisia assists its action.

**IN GONORRHEA**, as an injection, and in *Balanitis*, as a wash.

**IN NEPHRITIS**, acute and chronic, when mucus is found in the urine, use internally 1 to 4 drs. in water 4 ounces. Teaspoonful 3 or 4 times per day, as adjunct to other treatment.

**IN CYSTITIS**, acute and chronic, when the urine is pale or greenish, and viscid from abundance of mucus, use internally 1 to 4 drs. in water 4 ounces. In the severer cases of chronic Cystitis with phosphatic urine, rinsing out the bladder with tepid water, and following with Fluid Hydrastis 1 to 2 drs. to water 4 ounces; 1 ounce, to be used as an injection into the bladder, is often of great benefit.

**DYSPEPSIA**, with undue activity of the mucous glands and deficient action of the gastric follicles, of which the symptoms are a heavily-loaded tongue, especially at the base, and in the morning dull, aching pains in the stomach, with sinking sensations, nausea, and occasional vomiting of vitiated mucus, use  $\frac{1}{2}$  to 1 ounce Fluid Hydrastis to a pint of sherry or native wine. Dessertspoonful 3 or 4 times a day.

**IN CONSTIPATION**, either simple or of hepatic origin, in doses for an adult of gtt. 10 to gtt. 40, 3 times a day. In *Infantile* constipation, 1 to 2 drops twice daily.

**IN BRONCHORRHEA AND COUGH**, with expectoration of yellow, tenacious mucus.

**IN OPHTHALMI TARSII, CONJUNCTIVITIS**, and other diseases of the eye, in which occur mucous or moco-purulent discharges, locally gtt. 5 to gtt. 15 in distilled or soft water 4 ounces.

**IN INTERMITTENTS**, especially of the type characterized by disease of the *gastro*-intestinal mucous membrane, with nausea, heavily-coated tongue, broad and flabby and pale, or coated with yellow, dirty mucus; bowels constipated, or, when moved, clay-colored or streaked with mucus, use 1 to 4 drs. to water 4 ounces. Teaspoonful every 3 or 4 hours.

**IN CATARRH OF THE INTESTINES**, and superficial ulceration of same; in *Fistula* in Ano, and hemorrhage from the Rectum. Internally and locally by injection, 1 to 4 drs. to water 4 ounces.

**AS A LOCAL INJECTION**, to prevent decomposition, applied to the surface of cancerous growths and unhealthy ulcers and sores; as an injection into the bowels in diarrhoea and dysentery, and to correct the offensive character of many mucous discharges.

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tity of Urea in Abdominal Surgery." He found that this gave very important results in diagnosis, and advised certain precautions in its use to obtain success:

1. The analysis should always be made of a sample of the total amount of urine passed in the twenty-four hours. It should also be repeated several times, and for a number of days: at least ten days' results must be taken for an average.

2. The patient ought not to be suffering with tuberculosis, albuminuria, or fever.

As a rule, an adult will excrete twelve to twenty-four grammes of urea in the twenty-four hours. In benign tumors the average was fifteen to twenty-five grammes.

*Observation I.*—Patient, 42 years of age, whose doctor gave a diagnosis of ovarian cystoma, but the operator was inclined to think it a tumor of the spleen. The urea excreted daily was eighteen grammes ninety-one centigrammes, and the white globules were only one to twenty red ones. He thereupon gave a diagnosis of hypertrophy of the spleen, which was confirmed after operation.

*Observation II.* was also a splenic tumor, which this time had been diagnosed as cancer of the omentum. The average of urea daily was nineteen grammes forty-three centigrammes. Operation once more confirmed the diagnosis of tumor of the spleen.

In these tumors, then, the quantity daily excreted was *over* twelve grammes. It is quite different in malignant tumors, for here the cellular nutrition is rapidly interfered with, and the result is a relative incapacity to form urea. Cases to prove this were the following:

*Observation III.*—A woman showing signs of an ovarian cyst. Upon examination of the urine it revealed only four grammes of urea. This put him on his guard, and he first made a puncture, which brought out a greenish liquid and proved that it was a case of cancer of the omentum.

*Observation IV.*—A Brussels lady of 45, presenting a uterine tumor. Analysis of the urine revealed only 8.42 grammes of urea. Operation proved it to be a malignant neoplasm.

Several other cases were reported, all tending to prove the great utility of determining the quantity of urea eliminated in diagnosing abdominal tumors. In benign tumors the daily amount he had always found *over* twelve grammes, and in the malignant forms it was always *under* the twelve grammes.

Professor Guyon, of Paris, followed with "Indications and Contra-indications for Rapid Lithotripsy."

The second morning was taken up with M. Vaslin's paper on "The Nature and Treatment of Tetanus," in the discussion of which a large number of the surgeons present took part. It was followed in the afternoon by a number of "questions diverses," among which was that of "Vaginal Hyste-

rectomy," by Professor Richelot, the eminent surgeon, and the chief editor of the journal *L'Union Médicale*. Dr. Richelot said, "This operation is still young in France, as I can find only thirty cases in which it was performed, and ten of them were those upon which I myself operated. The operation is divided into three parts,—isolation of the uterus, treatment of the broad ligament, and treatment of the wound itself. The treatment of the broad ligament is the delicate part of it, owing to the difficulty that exists in applying ligatures, and the hemorrhage that results is the principal cause of death from the operation. I have advised for a long time the application of 'forcipressure' in these cases, and this method has been found favorable to success in these operations. There has been a great deal of discussion on the question of priority in the use of forceps-pressure, but I will not now enter on that debate, as it seems to me to be useless. I will simply say that the method has found an exceptionally happy application in the operation of vaginal hysterectomy. In regard to the treatment of the wound, we find it now entirely changed by the use of the forceps, as we no longer have to use a drain, for they assure the outflow of all liquids; nor do we need to use sutures, as the forceps are long enough to extend beyond the external opening of the vagina. This operation is, in fact, so easy of performance, and so safe, that I do not hesitate to advise it in all cases of cancer of the uterus that can be operated upon. Nothing should be left to the form of ablation called 'suspensory.' If it can cure cancer sometimes, surely the more radical operation of vaginal hysterectomy, as now performed, is much better and more thorough. In fact, I think the operation is sufficiently benign to advise it not only in uterine carcinoma, but also in cases of tumors that are not of a malignant nature, such as uterine fibroma that are very painful and by loss of blood threaten to destroy the patient.

"I would also advise operation by this means upon those forms of prolapsus and uterine retroversions that are rebellious to other treatment, and I think that one may go as far as to use this operation in some cases of uterine inversion and in utero-ovarian neuralgia."

M. Duploux, of Rochefort, M. J. Boekel, of Strasburg, M. Tédénat, of Montpellier, and M. Demons, of Bordeaux, all spoke in favor of the operation.

When M. Péan, of Paris, asked to speak, there arose considerable excitement, for it was known that there had been several letters published between Drs. Richelot and Péan on the subject of priority in using forceps-pressure, and it was understood that M. Péan would claim the entire invention and use of artery-forceps. The facts are that he has for some years been in the habit of using all sorts of



artery-forceps in his surgical operations at the St. Louis Hospital, but it must be admitted that M. Richelot deserves the credit of using them with such great benefit in the above-mentioned operation.

Dr. Péan claimed that he had for a long time advised preventive pinching of vessels not only in the abdomen, but elsewhere in the body, and spoke of his operations in the mouth by the aid of artery-forceps, going so far as even to compress the femoral, and he claimed the method as his, and blamed those writers who spoke of the forceps of Mariaud (an instrument-maker) and the bed used in ovariectomy, when it and all such instruments were made after M. Péan's designs. He did not claim to have invented the word "forcipressure," which belonged to M. Verneuil, who acknowledged it. (Upon inquiry we have learned that M. Koerberle claims to have invented all the methods of applying pressure by forceps, so that this part of the question is complicated.) At the moment of writing the Congress continues, with a very large attendance.

To turn to our usual work, an interesting clinic on the "Treatment of Simple Chancre and its Complications," by Dr. Mauriac, at the Hôpital du Midi, will serve to show the present mode of treatment in France in these affections, and if it is not original it may at least be useful. This hospital is an ancient and celebrated one for syphilitic diseases. It has three hundred and fifty beds, and it was first of all set aside for the use of nurses and newly-born syphilitic children, but afterwards it admitted all persons having venereal diseases. A few years ago a further change was made, and the sexes were separated by the creation of the Hôpital de Lourcine for women with these disorders, leaving this hospital for males only, so that at present it is one of the most important here for the study of venereal diseases. Professor Fournier's service at the Hôpital St. Louis still continues also to attract the attention that it deserves under the direction of that eminent speaker. Custom in the United States has warranted the name of "chancroid" for what the French call "chancre simple," but they both mean that form of contagious venereal disease or ulcer which is not accompanied by any constitutional syphilitic infection. Dr. Mauriac showed, in his opening remarks, that it was a local virulent affection that seldom extended farther than the nearest lymphatic ganglions. He noted as a curious fact that great accumulations of individuals constitute a cause of increase in this disease. For instance, in 1875, as at present, there was very little of this disease, but in 1878, when the city was so full, owing to the Paris Exhibition, there was a considerable increase, a very large number of cases being treated. So he thinks that the coming Exposition in 1889 will largely increase the number. (Happy prospect!) We pass over the doc-

tor's excellent description of chancroid and its complications, and come to the treatment, as being the part most interesting to compare with ours at home. He said, "In speaking of the diagnosis I have let you see that modern therapeutics is not powerless before this affection and its complications, and I then said that many liquids will destroy chancroid,—such as all the acids, all the alkalies, alcohol, chloroform, and even vinegar,—but I will add a formula the efficacy of which has often been proved to me:

R Acid. citric., 3 grms.;  
Acid. hydrochloric., 3 grms.;  
Tinct. ferri perchloridi, 3 grms.;  
Aque, 30 grms. M.

This you will apply yourselves as wanted. Destructive cauterization is indicated only when the chancroid is commencing, and when it is not situated on parts which we may fear to attack,—for instance, when it is near the urethral canal, and where one might produce a fistula; also it is contra-indicated when the sore is of great extent. If you decide on caustics, take the most energetic ones (and the best is the chloride of zinc). Diday employed equal parts of wheat flour and chloride of zinc, and he applied it in the form of a ring just the size of the chancroid, which he left in place until it melted: it certainly protects the neighboring epidermis. I, however, use a saturated solution of chloride of zinc, with which I paint the ulcerated surface sometimes twice or three times, but often only once will bring about a modification, and a radical change will show itself first in the disappearance of the pain in the chancroid (which do not confound with the pain produced by the cauterization itself, which is very severe); soon after you will notice that the surface of the ulceration has changed, its borders will fall away, and the centre will rise; but wait still some four or five days before promising a cure, as a small portion of it that has not been attacked by the caustic will be quite sufficient to reinoculate the disease, and your work must be done over again. When there is phagedænis I prefer the use of the thermo-cautery. Chancroid being an acute affection, it has been said that it is useless to cauterize, and some physicians employ frequent washing of the part with aromatic wine or this solution:

R Chloralis, 3 grms.;  
Aque, 300 grms. M.

Iodoform is difficult to employ in city practice, owing to its bad odor: this is a pity, as it will modify it very quickly and take away the pain. All these different substances may be indicated according to the seat of the chancroid. Remember never to cauterize them when they are on or close to the frænum penis or in the vaginal *culs-de-sac*. In women, as a rule, they heal more easily than



in men, and you will not need in their cases such energetic measures. Nitrate of silver is not bad, but employ it always in solution; never use the stick- or pencil-form, as it will wound the lymphatic vessels, which many practitioners think is the starting-point for venereal bubo.

"The treatment of the complications of chancroid merits your best attention: by itself, it is an inflammatory process that may be accentuated according to the patient's temperament or habits (alcoholism, etc.), so that a cauterization badly done may lead to a violent inflammation, and on to gangrene or phagedæna. Often these general causes are aided by a local one, such as paraphimosis, etc. The rule is to open all closed parts and wash them out with a solution of hydrate of chloral or boric acid. Phagedæna is a sort of molecular gangrene which depends not on the malady itself, but on the condition of the patient. Outside of ordinary causes, such as bad air or food, alcoholism, etc., there are individual cases occurring in persons who seem to be in the best of health otherwise. The chancroid takes a pale aspect, the borders get livid, and the ulcerated surface increases on all sides: cases have even been known that extended to the groin and perforated the bladder. It is very difficult to treat: tonics, iron, change of air, good hygiene, etc., are of first importance. Locally, cauterization is the treatment, but unless done at once it must be used with great caution; and here iodoform becomes a most precious remedy, dusted on well three times a day. The powder named after Bellini has been advised, but it is very dear and the formula is not constant. Another complication is the extension to the lymphatic system of the groin. Frequently it will extend only to the nearest lymphatic ganglion, but, as a rule, when your patient complains of pain in the groin, and there is a swelling, he has a bubo, and in a few days it will be ripe in most cases. The bubo most often appears in three or four weeks after the chancroid. As soon as you see it I advise you to make a puncture into it clear down into the gland itself; then you will most likely see some pus come out, which will relieve the tension, but you have not destroyed the virulent nature of the tumor in this way. It will be necessary to attack it with caustics, and, as before, chloride of zinc is the best to use. However, do not commence at once; you must wait for five or six days after the opening of the abscess, otherwise the chloride of zinc might fuse over into the adjoining tissues: so wait until it has well opened, and in the mean time use dressings of chloral solution."

*New Method for Detecting Albumen in Urine.*—Professor Quinquand, speaking at the Société de Biologie this week, gives this new method to determine the presence of albumi-

noid substances in urine. It is very simple, and ought to find great use in all clinical practice. It consists in simply filtering the urine and then adding to it a few drops of the well-known copper solution of Barreswill (that is used to detect sugar in urine). It is then heated up, and at once a characteristic and beautiful violet color appears (that is, if there is the slightest trace of albumen in the urine). Dr. Quinquand says that there are a number of kidney-alterations in which the albumen is rarely detected by the means usually employed, but that this solution will show the faintest trace of albumen in urine. We are reminded here that it is generally Fehling's solution that is used in America for sugar, and not that called Barreswill's here (which is the one Dr. Quinquand means), so we add the mode used here:

*"To Make Barreswill's Solution.*—Take 40 parts of crystallized carbonate of sodium, 50 parts of cream of tartar, and 40 parts of caustic potash, and dissolve them in 400 parts of water; also mix (apart) 30 parts of sulphate of copper in 250 parts of water; add these two solutions together and filter them, then add filtered water enough to make a litre in all."

*To Purify the Air in Wells.*—Several men having been killed here lately by the vitiated air in wells they had descended to make some repairs, M. Gréhan recalls attention to his recommendation always to introduce an animal into such wells before attempting to descend; he also now suggests a plan to draw the impure carbonic and other gases out of them by the use of a section of stovepipe, which is lowered into the well and fastened, and then a fire of charcoal is placed around the pipe at its upper extremity, a short distance from its summit, and at once on its heating up there will be a draught of air from within outward which will soon purify the well; but an animal must be tried on it first always for an hour before allowing men to descend.

*Injection of Gaseous Medicaments per Rectum.*—We said something in a former letter on this subject, which is now attracting great attention here. Professor Cornil spoke about it at the last meeting of the Académie de Médecine. Claude Bernard first showed that gases injected into the rectum were eliminated by the lungs without provoking any such accidents as the inspiration of the gases might cause. When we mix carbonic acid gas (which is very well tolerated by the rectum and lungs) with some medicated gas or vapor and have it injected per rectum, this last will be eliminated by the pulmonary air-cells, on which it will act directly.

The results obtained by this method which have been reported are most satisfactory: the respiratory rhythm is favorably modified; there is an increase of strength and a disap-

pearance of the fever and night-sweats. It was first tried by Dr. Bergéon, of the Faculty of Lyons, and is at present being used by Dr. Chantmesse, the chief of the pathological laboratory and physician to St. Antoine Hospital in Paris. So far it has been used in cases of asthma, bronchitis, whooping-cough, and pulmonary phthisis. Two of Dr. Chantmesse's patients who had severe attacks of asthma were given at once on entering the hospital injections of carbonic acid gas charged with sulpho-carbonated vapor, and there was an almost immediate relief in the dyspnoea, while after a few days' treatment the respiration became free. Nine other patients in the same service who had phthisis, with presence of the characteristic bacilli in the sputum, also obtained a considerable amelioration; the augmentation in weight was remarkable (from one to three pounds a week), with the cough and expectoration very much diminished. One of the last-mentioned patients gained nine pounds in six weeks. Care must be taken in the use of the different gases,—chlorine, bromine, ammonia, iodine, and turpentine,—some of which will cause inflammation of the intestinal mucous membrane. To use this treatment two operations are needed:

1. Manufacture pure gas, to prevent intestinal intolerance. To do this, take a large wide-mouthed bottle and put in it first of all three tablespoonfuls of bicarbonate of sodium, and adapt to this bottle a rubber cork with a rubber tubing coming from it to allow the gas to pass, and a hole to allow a funnel (glass) to be passed in; then make a solution of dilute sulphuric acid (of two hundred grammes of acid to a litre of water), pour this into the flask from time to time by the funnel, and as the gas escapes receive it in one of the rubber sacks that dentists use for nitrous oxide gas, holding about six litres.

2. The second operation consists in re-taking this carbonic acid gas, mixing it with the medicinal vapor, and introducing it into the rectum with the usual form of rubber bulb and tubing; or the carbonic acid gas can be made to pass through a bottle containing the medicament.

Professor Cornil has instituted a series of experiments in his service at the hospital, and he will give the results soon: we will visit the patients also, and be able to give a personal report of the method.

THOMAS LINN, M.D.

PARIS, October 22, 1886.

#### NEW YORK.

THE cause of medicine is not asleep in this city. The medical societies, including the Academy of Medicine with its several Sections, the Medical Society of the County of New York, and the Pathological Society, have begun work actively, and, if we

may judge from the amount of material presented at the first two or three meetings of what will come during the remainder of the season, there will be no complaint on the part of the medical journals for want of matter with which to fill their pages. Abstracts of the scientific proceedings of several of the Societies have already appeared in the *Times*, but mention may here be made of a donation to the Academy of Medicine of twenty-five thousand dollars by Mrs. Woerishoffer, who was induced to make the donation because of the interest manifested by her husband in the advancement of medical science, and because of the high and purely scientific position taken by the Academy, and its growing need for more room and for a fire-proof building to receive its large library. Ex-President Dr. Fordyce Barker, in offering resolutions of thanks to Mrs. Woerishoffer, expressed the hope that the Academy would soon come into possession, through the liberality of the wealthy people of the city, of a million dollars, the amount which he had formerly said was needed to make it the centre of medical science in this city, as it was destined to be.

Philadelphia people who are in a position to be charitable have come to recognize the wants of medical science and art, as has been repeatedly shown of late by donations of large sums for building hospitals and institutions for advancing medical learning. Henry George says, "All honor to the Astors and the Coopers for their gifts of libraries to the people, but," he adds, "it is no honor to the people to have to accept such gifts, for they should be in a position to build institutions for themselves." The doctors seem to think that, until they shall arrive at a point where they can build institutions worth a million dollars for themselves, they will give honor to those outside the profession who are able and willing to found such institutions for them.

While on the subject of donations to medical institutions, let me say that the new building for the College of Physicians and Surgeons will be completed and in use a year from now. The walls are up, and one can get a good idea of how the building will look when completed. The main entrance faces Fifty-Ninth Street and Roosevelt Hospital; joining the two wings, one facing Fifty-Ninth Street and the other Sixtieth Street, is the building containing the large lecture-room or amphitheatre. The structure is principally of a light-red brick. Not being wedged in between other houses, there will be a better opportunity for architectural effect than is possessed by some of our medical institutions.

It is understood that the medical department of the University of the City of New York will commence erecting the laboratory, for which a donation of one hundred thousand dollars has been received, next spring.

Bellevue has new and comfortable seats in

its amphitheatre, together with a place under the seat to put one's hat. The arms are high, making it somewhat inconvenient for taking notes during the lecture. It is a noticeable fact that our medical colleges have not a free coat-room: hence the unseemly stacks of wearing-apparel in the lecture-room.

Our medical colleges start out with even more than their usual number of students. At the College of Physicians and Surgeons about seventy more are enrolled than at this time last year, and at the University about fifty more, while Bellevue has its quota. One of the requirements for graduation at Bellevue is a course in the Carnegie or some other pathological laboratory, including the study of pathological and histological anatomy and the examination of the urine. At this college Dr. Janeway fills the position made vacant by the death of Dr. Austin Flint. At the University, Surgeon Billings, U.S.A., lectures on hygiene in October; the Chair on Physiology in this college having been left vacant, lectures in that branch will be delivered by Dr. W. C. Thompson and Dr. E. J. Bartlett; Dr. W. M. Carpenter has also been put down for a medical clinic in January; Professor R. A. Witthaus fills the Chair on Chemistry.

At the College of Physicians and Surgeons Dr. George L. Peabody fills the place of Professor Edward Curtis on *Materia Medica*, Professor Tuttle lectures on Gynæcology, and the names of Dr. W. T. Bull and Dr. R. A. Hall appear, in connection with those of Professors Markoe, Sands, and Weir, in the department of surgery.

At the meeting of the Medical Society of the County of New York, October 25, Dr. Laurence Johnson was elected President and Dr. F. R. S. Drake Vice-President. At this meeting Dr. Drake, of the Board of Censors, read a report from Mr. Purroy, counsel for the Society, regarding the prosecution of illegal practitioners, by which it appeared that out of over three hundred cases investigated during the year proceedings were instituted in forty-four, and, excluding some in which the clemency of the Society was shown, and a few others in which a trial had not yet been reached, all had been convicted. It may be remarked that the Society is doing a good work in freeing the community of a dangerous class of so-called medical men, and in a manner not to indicate, nor to appear to indicate, undue severity or self-interest. The Society has been very lenient wherever there has been any just warrant for leniency.

As bearing upon medical ethics, the question of recommending proprietary medicines arose, and a fact was brought out by some remarks made by Dr. Drake which merits the attention of the profession. On a circular recommending a proprietary medicine Dr. Drake's name, and that of Dr. Loomis, appeared without their previous knowledge. They wrote, calling the owner's

attention to it, and were favored by an impertinent reply. They then threatened suit, but a compromise was reached. Probably many of the numerous recommendations of proprietary articles by physicians appear without the presumable author's knowledge, and if some one would bring suit and obtain exemplary damages it would probably put a stop to such piracy. We see appended to a recommendation of some nostrum the name of Secretary Manning, Dr. Davis, or some other distinguished person, and, while we know that it is not at all probable that either of these gentlemen would give such a recommendation even if he had experimented with the nostrum, yet the proprietor knows also that it is not likely that Mr. Manning or the other gentlemen will ever see the advertisement, and that they will not be likely to have either time or disposition to reply to letters inquiring whether they had written such a recommendation. Moreover, not all the people who read it would write to those distinguished gentlemen, asking whether it were true. Thus the quack without conscience is sure to reap a harvest by the lie, while the people are the asses who give him the harvest,—viz., their money. I would suggest, however, that, although the people are so willing to play the part of asses, it is no reason why the impostors should not be made to feel the weight of the penal law.

The Institute for carrying out Pasteur's method of inoculation against rabies, under the charge of Dr. Mott at the Carnegie Laboratory, has had little material to work upon. It would seem that but few persons in this country are bitten by mad dogs, or else that those who are bitten have too little faith in the method to submit to the inoculations. It would also seem that there is an impression in the minds of the people that the method may prove not altogether harmless; otherwise, if they thought it offered even but the slightest chance of preventing the development of so terrible a disease, it would become fashionable to go to the Institute when bitten by a dog, whether it were mad or not.

The post-graduate medical schools are prospering. The Secretary of one of the schools told me that they had on their list two ex-presidents of a State Medical Society and several professors in medical colleges. Their class, he said, is larger by a very considerable number than that of any previous year. Being asked whether they met with any opposition from the colleges which confer the degree of Doctor in Medicine, he replied, "Not in the least;" that they were on the best of terms. As they received only graduates in medicine, the only effect their attendance had upon the medical colleges was to diminish the number of matriculants at those colleges, not diminishing the number of their graduates.

R. C. S.

## PROCEEDINGS OF SOCIETIES.

## NEW YORK ACADEMY OF MEDICINE.

AT a stated meeting of the Academy, October 21, 1886, the President, A. JACOBI, M.D., in the chair, a gift to the Academy of twenty-five thousand dollars from Mrs. Woerishoffer was accepted, and her name and that of her husband ordered placed on the roll of permanent benefactors.

The death of Ex-President Dr. Anderson, at the age of eighty-seven years, was announced by the Statistic Secretary.

## PULMONARY EMPHYSEMA.

Dr. FRANCIS DELAFIELD read a paper on this subject, illustrated by the stereopticon. He first gave a general idea of emphysema obtained from the text-books, and said that while they were such as the student entertained at the time of graduation in medicine, he soon found that those ideas did not correspond with what he observed. He found that compensating and senile emphysema were not of much importance, but that substantive emphysema was, and that it was a very common and a very serious disease. He found at the autopsy that dilatation of the air-vesicles was not always in proportion to the severity of the symptoms. If he injected the blood-vessels of the lungs artificially he found that he could obtain a very perfect injection, and he could not see exactly where the alleged obliteration of the capillaries could be. He noticed that very few patients had blown on wind-instruments, that many had not had bronchitis, and he doubted whether the expiration and inspiration theories were of much value. He found that many cases were hereditary; that the immunity from phthisis and pneumonia in patients with emphysema was hardly all that could be desired; that the barrel-shaped chest was not so often present as he had expected; that exaggerated vesicular tympanitic resonance was not very common. He was occasionally puzzled by cases which seemed to be cases of emphysema, but which had not the symptoms which he had been led to believe were characteristic of that disease. It seemed, therefore, worth while to abandon the traditional symptoms of emphysema, and to state fairly what we do and what we do not know about the disease.

If we considered all the cases of vesicular emphysema, they could be divided into three classes, as heretofore,—namely, senile, compensating, and substantive emphysema. Senile emphysema was of common occurrence, although not of great importance. It seemed to be a senile change in the parenchyma of the lungs. The walls of the vesicles were thin; their cavities dilated; they might rupture into one another. There was, however, no obstruction to the passage of the blood

through the lung, no dilatation of the right ventricle of the heart, no general venous congestion. This condition, when well developed, gave the loud vesicular tympanitic percussion-note said to be characteristic of emphysema. There was no marked dyspnoea, but chronic bronchitis was often present. The disease had no decided effect on the general health. He believed that in some patients substantive emphysema was first developed, and as they grew older it was modified by senile changes into something resembling senile emphysema. It was not always easy during the life of the patient to distinguish between senile and substantive emphysema, especially as chronic bronchitis might be present with both. But a distinction was important, as substantive emphysema was a serious matter, while senile emphysema was not.

Compensating emphysema involved only one lung or a part of one lung. It was seen most frequently with phthisis and with compression of the lung following pleurisy. In some cases the change in the lung seemed to be simply hypertrophy of its tissue, while in others there was a dilatation of the air-vesicles and a thinning of their walls. In still others the emphysema, although it might seem to compensate for the obstruction or obliteration of lung-tissue, was like substantive emphysema.

Substantive emphysema was formed by chronic inflammation, a pneumonia; and dilatation of the air-vesicles was more the result of this inflammation, and not the essential lesion of the disease. The inflammation was of the same type as that which so often attacked the endocardium, the inner coat of the arteries, the liver, and the kidneys, a chronic inflammatory change with the production of new fibrous tissue, and at the same time with atrophy and disappearance of normal tissue. The walls of the air-vesicles and of the air-passages were the parts of the lungs first involved in inflammation. These walls were in some parts of the lungs thickened, and in others thinned. Where the walls were thinned there was apt to be dilatation. Such a dilatation affected the air-passages rather than the air-vesicles, and might be confined to the former. The degree of dilatation varied very much in the different cases. It was not in relation to the severity of the symptoms, and the disease might go on to its fatal termination with hardly any such dilatation. He did not mean, however, that the condition of the lungs was not made worse by the dilatation. It unquestionably was; but, on the other hand, most of the symptoms of emphysema might be present, and the disease prove fatal with but very little dilatation. In fact, he believed that many cases of emphysema were overlooked at autopsies because no dilatation of the air-spaces was visible to the naked eye. In some cases there were little



holes in the walls of the air-passages and vesicles, formed in the spaces enclosed by capillary blood-vessels. They were found both at the periphery and at the centre of the vesicular walls, usually several in a single vesicle, some very minute, others of considerable size. Their edges were sharp-cut. They were found in vesicles of normal size as well as in those which were dilated. Although these changes in the air-vesicles constituted the essential lesion of substantive emphysema, yet the emphysema extended, as a rule, and reached other parts of the lung; and the epithelial cells which lined the air-spaces were increased in size. The mucous membrane of the bronchi became the seat of catarrhal inflammation. The disposition to the formation of new connective tissue became more marked, so that the walls of the air-cells were very much thickened and their cavities deformed and obliterated. The septa between the lobules, the walls of the bronchi and blood-vessels, and pulmonary pleura were all thickened, and very frequently there were also extensive pleuritic adhesions, so that the entire lesion assumed the form of a well-marked interstitial pneumonia.

In the milder cases there was no disturbance of the circulation of the blood, but in the severer cases such disturbances of the circulation became one of the worst features of the disease. It seemed evidently to be due to some obstruction to the passage of the blood through the lungs, for the right ventricular wall became dilated and hypertrophied, and venous congestion of the viscera and of the skin, and dropsy, were established. It had been said that the obstruction to the passage of the blood through the lungs was due to dilatation of the air-spaces and the obliteration of the capillaries in the walls. This explanation certainly could not be true for all the cases, for he found the most marked evidences of general congestion in cases in which dilatation of the air-spaces was trifling, and the complete artificial injection of the blood-vessels could be easily made after death. He believed that in a large number of cases the obstruction to the passage of the blood through the lungs was due not to structural changes, but to contraction of the small arteries in the lungs which existed during life and disappeared after death.

Dr. Delafield then gave the secondary lesions of emphysema. It was apt to begin between the ages of forty and forty-five years. Hereditary influence was marked. In general he could say that the same causes which led to chronic endocarditis, chronic endarteritis, cirrhosis of the liver, and chronic diffuse nephritis, also led to the development of substantive emphysema. Clinically it was much more important to observe the cases in which the disease was but moderately developed than those in which it was advanced, for moderate cases were to be benefited by

treatment, while bad ones comparatively were not. In the lesser degrees of emphysema there was no change in the shape of the thorax; in the more advanced cases there was prominence of the sternum and of the costal cartilages. In very bad cases the barrel-shaped deformity might be reached. Pulmonary resonance might remain unaltered for a considerable length of time. When changed, it was either a rather dull note of wooden quality or exaggerated resonance, of vesicular or vesiculo-tympanitic quality. The respiratory murmur was feeble, or there was feeble inspiration with longer, louder, low-pitched expiration, or both inspiration and expiration might be exaggerated, loud, and high-pitched. Bronchitis, when present, added its sibilant and sonorous breathing and râles.

There were many persons in whom substantive emphysema developed and continued for years without giving rise to any rational symptoms, and yet even in such persons it was often possible to be pretty sure of the presence of the disease, because they were persons whose general physical condition and age were such as were usually associated with emphysema. There were other patients in whom associated Bright's disease or cardiac disease gave rise to symptoms so marked that the emphysema passed unnoticed. In the regular cases dyspnoea was one of the most marked symptoms, at first developed only by exertion, and later existing perhaps constantly. It was a question of importance as to how much the dyspnoea was due to the condition of the lung-tissue and how much to the contraction of the blood-vessels. The complicating bronchitis gave rise to a variety of symptoms,—cough, expectoration, hæmoptysis, febrile movement, night-sweats. General venous congestion gradually developed. Having described the course of the disease in different patients, Dr. Delafield said its behavior was very much like that of atrophic chronic Bright's disease,—a slow inflammation, which gradually changed the structure of the affected organs. The organs, however, continued to perform their functions moderately well until their structure had become changed a good deal, and, in addition, disturbance of the circulation had been established. Then, either gradually or with a sort of explosion, the decided symptoms of the disease made their appearance.

The views which he wished to urge on his hearers' attention were: First, that substantive emphysema was not a local chronic disease due to rarefaction of the pulmonary structure and dilatation of the air-sacs, but a chronic inflammation of the lung. It was not due to excess of inspired air over expired air. Nor was the dilatation of the air-spaces the essential part of the lesion. The result of the inflammation was such an irregular

thickening and thinning of the walls of the air-spaces as would naturally be followed by dilatation. That excessive bodily exertion might render the dilatation greater than it otherwise would be seemed probable, just as in aneurism of the aorta we must have first disease of the wall of the vessel, and then excessive muscular exertion, to produce dilatation. That the dyspnoea and general congestion were not due simply to the dilatation of the air-spaces nor to the obliteration of the capillaries, but rather to the contraction of the blood-vessels. That the main indications for treatment were to delay the progress of the chronic inflammation and to overcome the contraction of the blood-vessels.

Dr. E. DARWIN HUDSON thought the view taken of pulmonary emphysema by the author of the paper was essentially a pathological one, whereas he had studied it chiefly from the stand-point of physical diagnosis and treatment. He was still of opinion that emphysema (in its typical form) was essentially, as defined by many of the old writers, a rarefaction of the terminal bronchi and walls of the air-cells, with dilatation. He thought one of the several pneumatic cabinets would be beneficial in treatment.

Dr. CHARLES HEITZMAN said his pathological studies supported the view taken by Dr. Hudson. He thought the cases described by Dr. Delafield were not cases of pure substantive emphysema, but combinations of emphysema with chronic interstitial pneumonia. He had many specimens illustrating the disease in its simple form.

Dr. R. VAN SANTVOORD had employed caffeine with benefit, and he thought it acted in the way Dr. Delafield had suggested, by relaxing the contracted small pulmonary vessels.

The PRESIDENT thought iodide of potassium, by producing absorption of the inflammatory products, would be beneficial.

Dr. DELAFIELD had found caffeine and convallaria specially stimulating to the right side of the heart, and of benefit in emphysema, as well as in other conditions requiring stimulation of the right auricle. As to iodide of potassium, it was useful because, as he thought, of its relaxing action upon the blood-vessels.

#### NEW YORK PATHOLOGICAL SOCIETY.

A STATED meeting was held October 13, 1886, the President, JOHN A. WYETH, M.D., in the chair.

Dr. H. MARION SIMS presented, in behalf of a candidate, specimens illustrating carcinoma of both ovaries, and of the colon and liver, together with a small fibro-myoma in the walls of the uterus, and suppurative inflammation of the kidneys.

The PRESIDENT presented, for a candidate, a specimen of cysto-sarcoma of the mamma.

#### CHRONIC DIFFUSE NEPHRITIS.

Dr. CARPENTER presented, for Dr. H. J. BOLDT, the kidneys of a man who died rather suddenly, aged 45 years. He had recently begun to drink heavily, but was in comfortable health and conscious to within fifteen minutes of death. He had had no symptoms of uræmia. The kidneys presented the lesions of chronic diffuse nephritis; the heart was hypertrophied; the brain and other organs were normal.

#### PECULIAR BROMIDE ERUPTIONS ON THE LEGS.

Dr. R. W. AMIDON presented a young woman, subject to epilepsy, who for about four years had been under his treatment, taking moderate doses of bromide of potassium, perhaps never more than four or five drachms a day. Over a year ago she discontinued it, but recently he learned that she had been taking during the past eighteen months a mixture of the bromides amounting to six drachms a day. She then returned to Dr. Amidon, and he found the ordinary acne eruption on the face, but this usually was confined to the face and neck, perhaps occasionally reaching the chest and shoulders. But in this patient, and in two others whom he had seen, the lesion had invaded the legs and assumed almost the pustular form. He had found a description of the lesion in only one book. It commenced as a large single acne eruption, which became inflamed, with indurated, rather large base, and after rather a chronic inflammation broke down, forming what appeared to be a small ulcer: vesicles which tended to become cloudy and purulent formed in rings about the acne-spot. After a time the centre of the spot took on a reparative process and entirely healed, while the pathological changes at the periphery spread, and the vesicles became purulent, dried up, and formed a brownish scab. A section of one of these spots showed that there had not been a true ulcer; that the skin had simply been denuded of the cuticle, leaving the papillæ intact. He had in no case seen the true skin entirely invaded. The disease ran a slow course: it did not seem to depend particularly upon the amount of the bromides given. The only treatment which he had seen do good was the thorough application of the actual cautery. Dr. Amidon showed photographs of the other cases.

#### SIMPLE *versus* MALIGNANT ACUTE ULCERATIVE ENDOCARDITIS.

Dr. T. MITCHELL PRUDDEN presented four hearts and some culture-specimens of the *Staphylococcus pyogenes aureus*. In the first three cases the patients had died with the symptoms of acute ulcerative endocarditis, and the post-mortem examination confirmed the diagnosis of simple acute ulcerative endocarditis, with absence of bacteria in the diseased tissue on the endocardium. In the



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Quinidie Bi-Sulph., 2 grs.....		2 00	{ Plumbi Acet., 1 gr.		
APERIENTS.			CATHARTICS.		
Aloes et Mastich.....		50	Cathartic Comp., U. S. F.....		50
Anti-Constipation.....		75	Cathartic Comp., Improved.....		50
{ Podophyllin, 1 gr.			{ Ext. Coloc. Comp., 1 gr.		
{ Ext. Nuc. Vom., 1 gr.			{ Ext. Jalap., 1 gr.		
{ Pr. Capsicum, 1 gr.			{ Podophyllin Leptandrin, 1 gr.		
{ Ext. Belladonna, 1 gr.			{ Ext. Hyoscyami, 1 gr.		
{ Ext. Hyoscyami, 1 gr.			{ Ext. Gentiana, 1 gr.		
Aperient.....		85	{ Ol. Menth. Pip., 1 gr.		
{ Ext. Nuc. Vomica, 1 gr.			Cathart. Comp., Cholagogue.....		60
{ Ext. Hyoscyami, 1 gr.			{ Res. Podophylli, 1 gr.		
{ Ext. Coloc. Co., 1 gr.			{ Pil. Hydrarg., 1 gr.		
Chapman's Dinner Pills.....		60	{ Ext. Hyoscyami, 1 gr.		
Colocynth et Hyoscyamus.....		75	{ Ext. Nuc. Vom., 1 gr.		
{ Ext. Coloc. Co., 1 gr.			{ Ol. Res. Capsici, 1 gr.		
{ Ext. Hyoscyami, 1 gr.			Hepatic.....		80
Laxative.....		60	{ Pil. Hydrarg., 1 gr.		
{ Pulv. Aloes Soc., 1 gr.			{ Ext. Coloc. Co., 1 gr.		
{ Sulphur, 1 gr.			{ Ext. Hyoscyami, 1 gr.		
{ Res. Podophylli, 1 gr.			Podophyllin, 1 gr.....		60
{ Res. Guaiac., 1 gr.			Rhei Comp., U. S. F.....		75
{ Syr. Rhamni, 1 gr.			Cascara Sagrada Comp.....		75
			{ Ext. Cascara Sag., 1 gr.		
			{ Res. Podophylli, 1 gr.		

PILLS SENT BY MAIL ON RECEIPT OF PRICE. SUPPLIED BY ALL DRUGGISTS.  
January, 1896.



# ---THE--- BEST INFANT FOOD

IS THAT WHICH IS THE NEAREST LIKE MOTHER'S MILK.

Mother's milk contains no starch.

Mother's milk contains no cane-sugar.

Mother's milk contains no malt-sugar.

Therefore, infant foods which contain these present to the infant substances which are foreign to its natural food, and which are unsuited to the physiology of infant digestion.

Normal human milk is persistently alkaline; this alkaline reaction is due to the presence of peculiar mineral and saline constituents which differ materially from those of cow's milk, which is slightly acid in reaction.

It is impossible to imitate this peculiar reaction of normal mother's milk by the use of soda or potassa bicarbonate, or lime-water.

Nor do these alkalies adequately represent the saline and mineral constituents of human milk, which are such important elements in the nutrition of the infant, being vitally necessary to the development of its osseous system.

The caseine of cow's milk differs radically in character from the albuminoids of human milk.

Not one of the Farinaceous, Malt, Liebig, or Condensed Milk Foods contains any principle capable of acting upon caseine, or digesting it, or in any way converting it into the peptone-like form in which the albuminoids exist in human milk.

## Peptogenic Milk Powder yields a "HUMANISED MILK"

which, in taste, physical characters, and chemical constitution, approaches very closely to woman's milk:

1. Because it contains milk-sugar, and no other sugar, and no starch.
2. Because it contains the digestive ferment trypsin, which converts caseine into peptone.
3. Because it contains those various organic combinations of Phosphates, Chlorides, Potassium, Lime, Iron, Magnesium, and Sodium which are always normally present in woman's milk.
4. Because it gives the alkaline reaction characteristic of human milk, due to these saline and mineral constituents.

A candid consideration of these facts must inevitably lead to the conclusion formed by Dr. Albert R. Leeds,—viz., "That the Peptogenic Milk Powder yields an artificial human milk which in every particular more closely resembles average normal mother's milk than that obtained by any other product or process known."

Respectfully submitted,

**FAIRCHILD BROS. & FOSTER,**

82 and 84 Fulton Street, NEW YORK.



fourth case, that of a girl who had developed pyæmia following a surgical operation, attended by the symptoms of acute ulcerative endocarditis, the *Staphylococcus pyogenes aureus* was demonstrated by the culture-method, placing the case among the malignant or bacterial variety. Inoculations of the bacteria into rabbits, with and without wounding the endocardium, were made, and in those with injury acute malignant ulcerative endocarditis developed, while in the others no endocarditis developed. Lesion of the endocardium without injection of the bacteria was also unattended by the development of the disease. These experiments went to show that a previous lesion or predisposing condition had to be present in order to invite the bacterial endocarditis. In the case of the girl, the malignant endocarditis developed on a chronic endocardial lesion.

Dr. Prudden said the cases emphasized the distinction between malignant and simple acute ulcerative endocarditis,—in the one case the bacteria being present, in the other absent.

#### MITRAL STENOSIS—THROMBOSIS OF THE RIGHT AURICLE.

Dr. R. VAN SANTVOORD presented the heart of a boy, aged 10 years, in whom the diagnosis of acute ulcerative endocarditis was made, whereas the autopsy showed only mitral stenosis and a thrombus in the right auricle. There had been petechial spots over the body, and general œdema, and a double mitral murmur was present.

#### ULCER OF THE COLON—ABSCESS OF THE LIVER.

The specimens were presented by Dr. FRANK FERGUSON, with a brief history. Dr. Ferguson also presented the brain illustrating

#### ANEURISM OF THE POSTERIOR BRANCH OF THE MIDDLE CEREBRAL ARTERY.

The patient, aged 48 years, died about four hours after falling suddenly and becoming unconscious. He had previously been healthy.

#### MALARIAL PIGMENTATION.

Dr. FERGUSON also presented specimens from two patients who had died after having suffered from malarial fever. Pigment was present during life in the blood, and at the autopsy all the organs of the body, especially the brain and the stomach, were exceedingly dark from pigmentation.

#### LARGE CYSTIC TUMOR OF THE SCALP.

Dr. ROBERT NEWMAN presented a cyst, about the size of an orange, removed entire from the side of a woman's head.

#### NASAL POLYPUS.

Dr. FERGUSON also presented the remains of a large nasal polypus, the last part having been removed by Jarvis's snare, it being the

only case in which he had found the snare superior to the galvano-cautery and torsion.

## REVIEWS AND BOOK NOTICES.

**THE MATHEMATICAL THEORY OF ELECTRICITY AND MAGNETISM.** By H. W. WATSON, D.Sc., F.R.S., and S. H. BURBURY, M.A. Vol. I. **ELECTROSTATICS.** Large 8vo, pp. xii., 268. New York, Macmillan & Co., 112 Fourth Avenue.

For a work of this magnitude and excellence the authors are certainly modest, in their preface, as to their claim for originality. That the treatise will compare very favorably with Maxwell's great work, or Gordon's, is evident at a glance. Whilst the greater part of this volume is strictly mathematical in its deductions, it is not at all abstruse or too difficult to follow in the hands of any student ordinarily proficient in algebra. The theory involved is that of two fluids, and the treatment is well handled. The chapters on Potential, on Theoretical Inversion in Electrical Problems, Electrical Systems in Two Dimensions, and Electrical Energy are specially instructive, and the book as a whole is indispensable to investigators in every branch of electrical work or research. W. R. D. B.

**TABLETS OF ANATOMY.** By THOMAS COOKE, F.R.C.S. Eng., etc. Fourth Edition, or Selections of the Tablets believed to be Most Useful to Students generally. London, Longmans, Green & Co., 1885. Small quarto, pp. 294.

These tablets have for their origin a synopsis of demonstrations given by the author in the Westminster Hospital Medical School some years since. They are convenient for students who are preparing for examinations, and form a useful companion to the several dissector's manuals in impressing dry anatomical details upon the mind: they are intended especially for those who, having already gone over the subjects treated of, desire to review the main points rapidly and comprehensively. For such the present publication offers special advantages.

**CUTANEOUS MEMORANDA.** By HENRY G. PIFFARD, A.M., M.D. Third Edition. New York, William Wood & Co., 1885. 24mo, pp. 268. (WOOD'S POCKET MANUALS.)

This illustrated manual in twenty-four chapters considers the anatomy and physiology, the pathology and therapeutics, of the usual disorders of the skin. It is clearly written, and the directions for treatment are intelligible. On account of its terseness and directness of statement, the work is of great service to students.

## NEW REMEDIES AND CLINICAL NOTES.

**THE PHYSIOLOGICAL TREATMENT OF CHOLERA, AFTER SEMMOLA.**—We abstract from a recently-published work, "*Nuove Ricerche terapeutiche sul Cholera Asiatica*," in which this well-known Italian clinician has laid down the clinical and therapeutic experiences gathered during the recent Italian epidemic of cholera, his views on what the author calls the "physiological treatment of cholera." Semmola holds that no cure can ever be expected from any medication directed specifically against the comma-bacillus, and also warns of too heroic a therapeutic interference with the symptoms of the premonitory and algid stages.

A physiological treatment, in the judgment of the author, is one which is directed towards raising the vital energy of the body, so as to endow the same with a higher power of resistance against the disease without injuring the entire system by the bio-chemical action of pharmacal agents.

The main features of this treatment are the following:

1. Absolute rest of the affected organs—viz., the gastro-intestinal tract—by observing a strict fasting on appearance of the first diarrhoea stools. As long as the diarrhoea persists, no food whatever is to be taken. Over six thousand clinical observations in Naples have shown that even five or six teaspoonfuls of bouillon given prematurely (*i.e.*, before the stoppage of the diarrhoea) sufficed to reproduce the gravest symptoms, such as algidism and asphyxia. After the disappearance of diarrhoea and vomiting, milk may be given in very small quantities.

2. Timely excitation of the physiological powers by therapeutic, or, rather, by physiological, means. The best of these are undoubtedly repeated warm baths. To prove beneficial the baths must, however, be given in the first period of the disease, before any sign of algidism has set in. The application of the warm bath in cholera has been in vogue also in former times, but never yielded any benefits, as it was employed only in the algid stage of the affection. The warm bath is not alone useful, as was held formerly, on account of the supply of heat to the cold surface of the body (a mere physical process), but also and particularly on account of the physiological influence it exerts on the economy. The warm bath excites the peripheral nervous system, and at the same time, by reflex action, the centre of circulation. The consequence of this excitation is a harmonious restoration of the functional physiological relations between the surface of the body and its internal apparatus, especially those of the digestive tract. True, this biological process can be realized only in the first stage of the

disease, when the biological relations between the superficial and internal organs have not yet been essentially altered or broken off altogether.

Through diaphoresis the bath favors besides the elimination of toxic substances from the system, which, by affecting the various nerve-centres, cause ominous alterations in the secretory, vaso-motoric, and general oxidation processes. If necessary, the bath can be repeated every one or two hours. After the bath the patient is to be wrapped up in woollen blankets, and is to be given warm aromatic and weak alcoholic drinks. It is well to give also small doses of opium (*laudanum*, *liqueur de Battley*, *chlorodyne*), in order to render the nervous centres less susceptible to the toxic principles, and in order to reduce the increased intestinal secretion. Opium, given at the proper time, aids and supplements the physiological treatment. —*Therapeutic Gazette*, October 15, 1886.

**COCAINE IN WHOOPING-COUGH.**—Dr. L. Emmett Holt (*New York Medical Journal*) tried cocaine in five cases in young children, with the result of developing serious nervous phenomena. He concludes his paper, which was read before the New York Clinical Society (September 24), with the following practical deductions:

- "1. Cocaine must be used with great caution in young children under all circumstances.

- "2. The spray is never to be recommended, since an uncertain quantity is given.

- "3. Solutions stronger than four per cent. should not be used by swab or pencil in children under two years, and in older ones only with great caution. This remark applies to the rectum as well as to the throat.

- "4. In the cases where it was tried he failed to see any notable benefit in the disease.

- "5. Chloral seemed to be of very decided value in controlling symptoms due to cocaine." He suggested a more extended trial of it in this direction.

**GELOSINE AS A VEHICLE FOR EXTERNAL MEDICATION.**—Gelosine is a mucilaginous principle extracted from the *Gelidium cornutum*, a native of Japan. It is a colorless, amorphous, non-nitrogenous substance which forms the basis of vegetable jellies. It is soluble in warm water, rendering solid on cooling five hundred and fifty times its own volume, the result being a fine transparent jelly, which is very slow to undergo putrefactive changes. M. Guérin considers that gelosine is admirably adapted for purposes such as poultices, vaginal and urethral suppositories, etc. The jelly undergoes gradual contraction, in which process any medicinal substance contained is slowly expressed until complete desiccation is effected, thus bringing it constantly into contact with the skin. The only preparation needed is to dissolve gelo-

sine in suitable quantity in warm water, and then add the medicinal agent, either in solution or in a state of fine division.—*London Medical Record.*

### MISCELLANY.

**THE LEGAL STATUS OF A DEAF-MUTE.**—The New Jersey Court of Chancery has had before it the question of the capacity of a deaf-mute to manage her property. The case is an interesting one, and the testimony as to the mental condition of the deaf-mute was as follows. "She is about sixty-five years old, and has never been married. The commissioners have made a report concerning her condition. They say that she is not an idiot or lunatic in the popular sense of the words; that she has been a deaf-mute ever since she was two or three years old; that she is ignorant, having never been taught any language, whether spoken or of signs; that she can neither read nor write, and cannot express to others her understanding, if any she have, of any business transaction; that she cannot be made to comprehend a business transaction, except, perhaps, a very ordinary one, involving no more money than a dollar or two; that she has learned to fetch and carry and to do common every-day housework,—that is, she can sweep, wash, cook an ordinary meal, etc.; that it is possible by rude gestures to communicate to her a desire that she should do such work; that she has never managed her property, nor any part thereof, and that the acting trustee of her estate has never informed her of the amount, character, or income of her property, and that it is doubtful whether she can be so informed; that she has always been cared for by her near relatives, with whom she has lived, by her mother for about fifty years and until her mother's death; after her mother's death by her unmarried sister so long as that sister lived, and since that sister's death by her married sister, with whom she now lives."

There were twenty-four jurors called to decide on the inquisition into her case, and of these twenty-four nineteen found that the deaf-mute was of "sound mind and capable of controlling her property by her own selection of a proper person to act for her." The other five certified that she was "not of sufficient understanding to enable her to manage her property." An application was made to the court to set aside the finding of the majority of the commissioners, and this, it would seem, was very properly granted by the court, which held that she could not manage her estate.

The judge said, "If the proof was as the commissioners certify, that she is incapable of understanding the business, or even of receiving any communication upon the subject, and therefore does not understand, and can-

not be made to understand, what the necessities of the management of her estate demand, or what an agent is, or what his duties are, or, in other words, if the proof was, as they certify, that she does not understand, and cannot be made to understand, any matters of business, except it may be such as are of the simplest character; if she has no comprehension of business matters, it is obvious that she is not capable of managing her affairs, and the inquisition cannot be sustained. The jury does not find that she is herself competent to manage her business, but that she is capable of controlling it by an agent of her own selection.

"But if she cannot be made to understand what the business is, how can she select an agent to manage it? The inquisition will be set aside."

**ELEVATED RAILROADS LIABLE FOR INJURIES CAUSED THROUGH NEGLIGENCE.**—A recent case in the Supreme Court of New York is of considerable interest, because the class of accidents it mentions are becoming frequent. The plaintiff was walking along Third Avenue, New York City, and was injured by a hot cinder falling in her eye from the engine of a train on the Manhattan Elevated Railway. On the trial of the action, which was brought to recover damages for the injury, the fact of the accident and the place and occasion were proved, but no further evidence of the negligence of the railroad company was furnished. Upon these facts the trial judge dismissed the case, holding that, as the railroad had been authorized by law, the plaintiff, to recover, must show that it was conducted without the proper safeguards to prevent injury.

The court, on appeal, held that this was not the correct principle, and in an interesting opinion decided as follows: "It would seem to be an extraordinary proposition that a person using as a matter of right the highway, and receiving such an injury as the plaintiff did, should be obliged to show in the first instance that it resulted not only from the defendants' act, but, in addition thereto, that the defendants had not adopted the best means of preventing such an occurrence. This would necessarily involve an examination of the defendants' engine, and an examination scientific in its character, as to whether by any known contrivance it could have been avoided. It would seem more in accord with the principles of natural justice to exact such evidence in response from the company. . . . When the plaintiff proved the injury under the circumstances disclosed, the negligence of the plaintiff was established *prima facie*, and the onus was thrown upon the defendants to show absence of negligence, if it could be done. The injured person cannot be expected to attempt the useless feat of pursuing the train in order to secure an examination of

its locomotive, with a view of discovering what mode was adopted to prevent injuries such as described."

**NEW APPOINTMENTS IN THE UNIVERSITY OF PENNSYLVANIA.**—Daniel G. Brinton, A.M., M.D., the well-known editor of the *Medical and Surgical Reporter* of this city, and the author of valuable works upon aboriginal American languages, has been elected Professor of American Archæology and Linguistics in the Literary Department of the University of Pennsylvania. The trustees at the same meeting appointed Dr. Morris Jastrow, Lecturer on Arabic and Assyrian; Dr. Herman V. Hillbrecht, Lecturer on Egyptology; Dr. James M. Cattell, Lecturer on Psycho-Physics; and Mr. E. Kelly, Assistant Instructor in Mammalian Anatomy in the Biological Department. Drs. H. Y. Evans, Richard A. Cleemann, and F. S. Stryker were elected Managers of the University Hospital.

**HORSFORD'S ACID PHOSPHATE.**—We are informed that Dr. W. S. Leonard, of Hinsdale, New Hampshire, has used Horsford's Acid Phosphate in his practice for the past eight or ten years, and has been much gratified with the results obtained from its use. In various forms of dyspepsia it reaches a class of cases that no other medicine seems to touch, and he has repeatedly seen patients, where opiates were contra-indicated, obtain refreshing sleep and rest at night from a single dose at bedtime.

**DR. J. R. F. BELL** has removed to No. 2028 North Broad Street.

**DR. F. B. HAZEL** has removed to 841 North Broad Street.

**DR. CHARLES S. TURNBULL** has removed his office and residence to 1719 Chestnut Street.

## NOTES AND QUERIES.

### COCAINE-ADDICTION.

MR. EDITOR,—If any reader of your journal has met with a case of cocaine-addiction and will send me the fullest details at his command, I will thank him for the courtesy, reimburse him for any expense incurred, and give him full credit in a coming paper.

J. B. MATTISON, M.D.  
314 STATE STREET, BROOKLYN.

## OFFICIAL LIST

OF CHANGES IN THE STATIONS AND DUTIES OF OFFICERS SERVING IN THE MEDICAL DEPARTMENT U.S. ARMY FROM OCTOBER 24, 1886, TO NOVEMBER 6, 1886.

MAJOR B. A. CLEMENTS, SURGEON.—Died November 1, 1886, at Fort Leavenworth, Kansas.

MAJOR J. S. BILLINGS, SURGEON.—Granted leave of absence for eight days. S. O. 246, A. G. O., October 22, 1886.

MAJOR J. V. D. MIDDLETON, SURGEON.—Ordered from Department of Missouri to David's Island, New York Harbor.

MAJOR A. A. WOODHULL, SURGEON.—Ordered from David's Island, New York Harbor, to Department of Missouri.

MAJOR J. W. WILLIAMS, SURGEON.—Ordered from Department of Colorado to Department of the East.

CAPTAIN J. K. CORSON, ASSISTANT-SURGEON.—Ordered from Jefferson Barracks, Missouri, to Department of Colorado, upon expiration of present leave of absence.

CAPTAIN H. S. TURRILL, ASSISTANT-SURGEON.—Ordered from Department of the Platte to Department of Colorado.

FIRST-LIEUTENANT BENJAMIN MUNDAY, ASSISTANT-SURGEON.—Ordered from Department of Colorado to Jefferson Barracks, Missouri.  
S. O. 252, A. G. O., October 29, 1886.

CAPTAIN JOHN V. LAUDERDALE, ASSISTANT-SURGEON.—Leave of absence extended one month. S. O. 249, A. G. O., October 26, 1886.

CAPTAIN JOS. K. CORSON, ASSISTANT-SURGEON.—Granted leave of absence for one month, to take effect when his services can be spared. S. O. 246, A. G. O., October 22, 1886.

CAPTAIN E. B. MOSELEY, ASSISTANT-SURGEON.—Relieved from duty in Department of the Columbia, and ordered to report in person at Headquarters, Division of the Pacific, for assignment to duty. S. O. 87, Division of the Pacific, October 16, 1886.

FIRST-LIEUTENANT WILLIAM O. OWEN, ASSISTANT-SURGEON.—Relieved from duty at Fort Schuyler, New York Harbor, and ordered for duty as post-surgeon, Plattsburg Barracks, New York. S. O. 170, Division of the Atlantic, October 29, 1886.

FIRST-LIEUTENANT GUY L. EDIE, ASSISTANT-SURGEON.—Ordered from Fort McIntosh, Texas, to Post of San Antonio, Texas. S. O. 152, Department of Texas, October 27, 1886.

FIRST-LIEUTENANT H. S. T. HARRIS, ASSISTANT-SURGEON.—Ordered from Post of San Antonio, Texas, to Fort Clark, Texas. S. O. 152, Department of Texas, October 27, 1886.

### OFFICIAL LIST OF CHANGES IN THE MEDICAL CORPS OF THE U.S. NAVY FOR THE WEEK ENDED NOVEMBER 6, 1886.

SURGEON J. L. NEILSON.—Ordered to the Receiving-Ship "New Hampshire."

SURGEON M. C. DRENNAN.—Detached from Receiving-Ship "New Hampshire," and granted one year's leave.

### OFFICIAL LIST OF CHANGES OF STATIONS AND DUTIES OF MEDICAL OFFICERS OF THE U.S. MARINE HOSPITAL SERVICE FOR THE TWO WEEKS ENDED NOVEMBER 6, 1886.

AMES, R. P. M., PASSED ASSISTANT-SURGEON.—Relieved from duty at Marine Hospital, New York, to assume charge of Marine Hospital, Vineyard Haven, Massachusetts, November 1, 1886.

URQUHART, F. M., PASSED ASSISTANT-SURGEON.—To proceed to Norfolk, Virginia, for duty, November 4, 1886.

YEMANS, H. W., PASSED ASSISTANT-SURGEON.—Relieved from duty at Marine Hospital, San Francisco, California, to assume charge of the service at Galveston, Texas, November 1, 1886.

WASDIN, EUGENE, PASSED ASSISTANT-SURGEON.—When relieved, to proceed to New York for duty at Marine Hospital, November 1, 1886.

WILLIAMS, L. L., ASSISTANT-SURGEON.—Relieved from duty at Wilmington, North Carolina, to proceed to Pittsburgh, Pennsylvania, for temporary duty, November 5, 1886.

PERRY, T. B., ASSISTANT-SURGEON.—Relieved from duty at Marine Hospital, St. Louis, Missouri, to proceed to San Francisco, California, for duty at Marine Hospital, November 1, 1886.